SIMULATION, TRAINING, AND INSTRUMENTATION COMMAND

2001 ANNUAL REPORT

COMMANDING GENERAL

BG STEPHEN M. SEAY

STRICOM Stakeholders,

Hooah!

What a great year! That train keeps running at 100 mph and you keep pace without losing stride. This 9th Annual Report brings to a close another significant year for the Simulation, Training and Instrumentation Command (STRICOM). STRICOM continues supporting all the Department of Defense's (DoD's) simulation, training and test needs from requirement generation through life cycle support. Our expertise remains unmatched by any other organization in creating, servicing and supporting soldiers training needs.

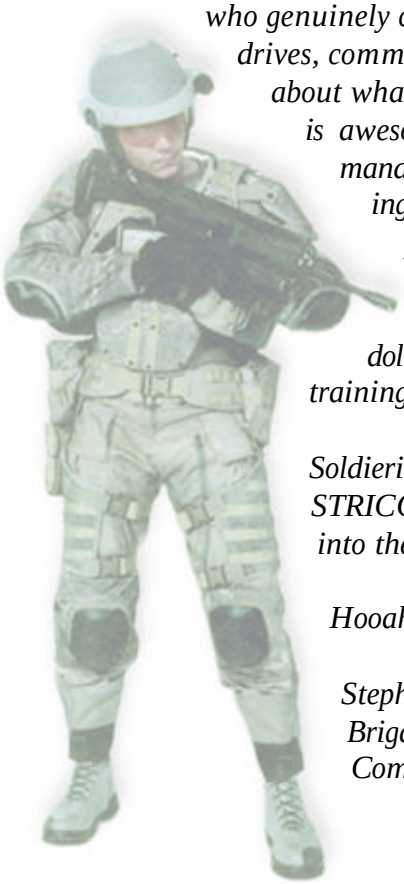
Spearheaded by STRICOM, Embedded Simulation Systems (ESS) will provide mounted soldiers with training systems having the same durability, adaptability, versatility, deployability, and sustainability as the weapons systems they support. These systems, embedded in the combat vehicles themselves, transform the way Army Forces train. This enables soldiers to train at any time and any place warfighting units are located. ESS provides the Army with the ability to share information rapidly and accurately. Integrated into future combat platforms, ESS shares vital wartime information and reconnaissance

by interfacing with platforms' command, control, and intelligence sharing systems. In combat and in training, it assists in answering the three most critical questions: where am I; where are friendly units; where is the enemy?

Thoroughly testing all systems going into combat conditions, ensures battlefield survivability. STRICOM currently supports testing and instrumentation of the Legacy Force, and Interim and Objective Forces. STRICOM provides realistic and economical targets making testing of Future Combat Systems accurate, efficient and economical.

Through the STRICOM Omnibus Contract (STOC), we have shortened lead times for procurements while maintaining a broad industry base in technology and simulation expertise. STOC allows our customers to procure simulation, training or testing equipment in the form of a total system, support or technical services in accordance with all DoD regulations any time during the acquisition cycle.

Future training environments are more than devices and infrastructure. Embedded simulations, reach-back capabilities and a support structure geared to training warfighters anywhere, anytime will replace the institutional "going to training" warfighter routine. STRICOM supports transformation by pushing new technologies, thus allowing Army trainers and strategists to look at systems that do not yet exist and actually evaluate and test capabilities in simulation. STRICOM bends the electrons before bending metal.



STRICOM is people, experts in their work, professionals all, who genuinely care about what they do - whether it's blood drives, community service or talking with their neighbors about what they do at STRICOM. And, what they do is awesome. STRICOM is more than just a command, it's family. Caring about one another, helping each other…making the community a better place to live and providing our young men and women in service, our warfighters, simulation technology that saves lives and training dollars while providing them with realistic combat training in a safe environment…every day!

Soldiering is, indeed, an affair of the heart and the STRICOM family takes pride in putting simulations into the hands of our soldiers.

Hooah !

Stephen M. Seay
Brigadier General, USA
Commanding

STRICOM

TABLE OF CONTENTS

Forward by Brigadier General Stephen M. Seay, Commanding General

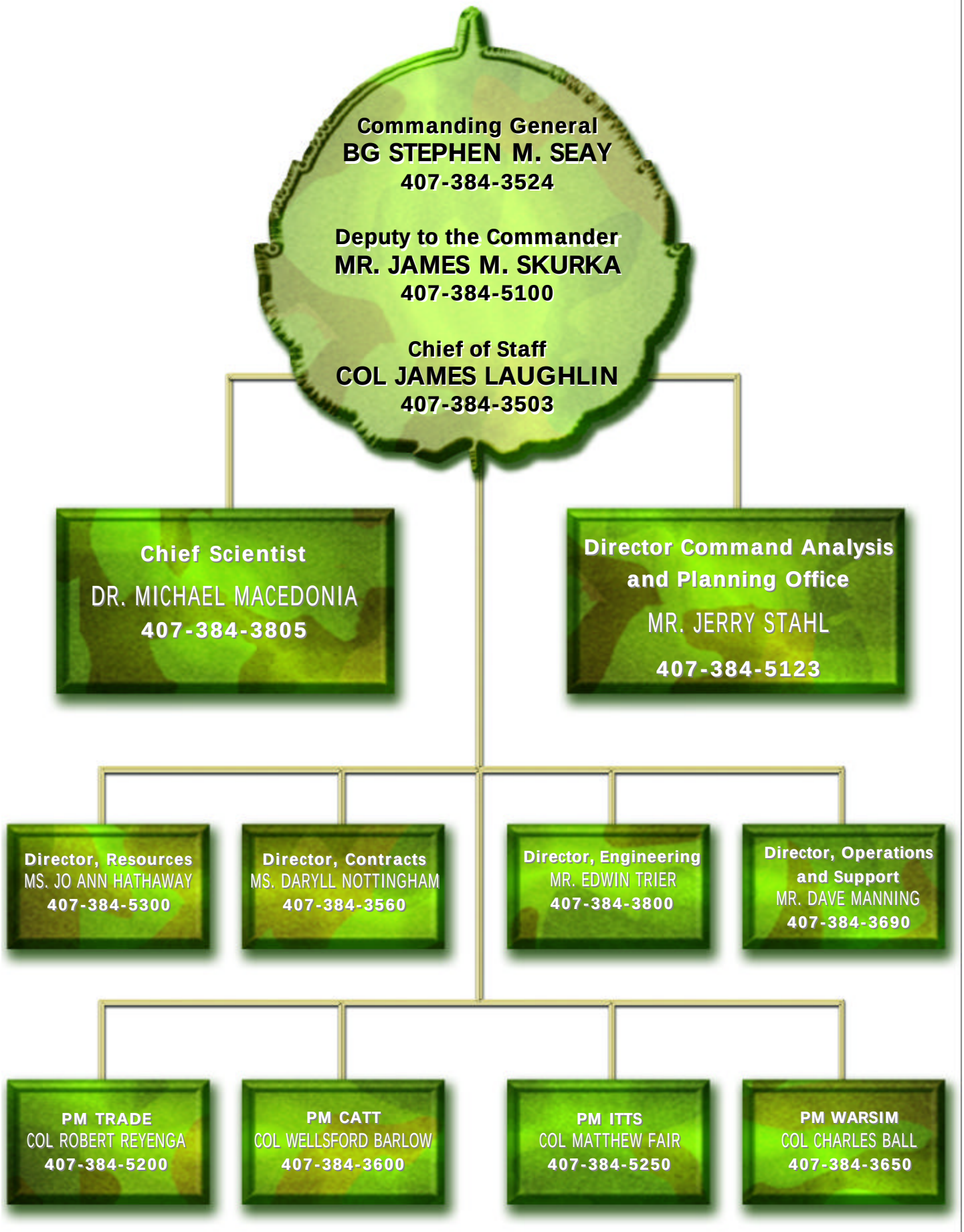
Contents:

STRICOM VISION

STRICOM'S VISION FOR THE OBJECTIVE FORCE

On Point for the Army in Interoperable Training, Testing, Instrumentation and Simulation Solutions for the Army's Transformation to the Objective Force!

VISION



STRICOM ORGANIZATIONAL CHART

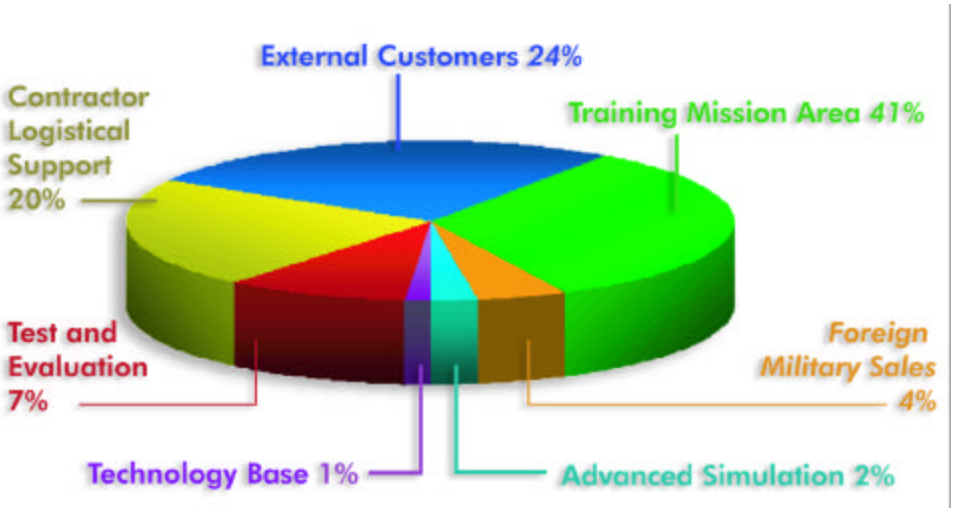
COMMAND FINANCIAL HIGHLIGHTS
Year ending 30 September 2001:

STRICOM Financial Highlights	1999	2000	2001
Training Mission Area	309	268	407
External Customers	161	212	239
Foreign Military Sales	91	28	54
Technology Base	8	16	12
Advance Simulation	8	7	17
Test & Evaluation	78	80	65
Contractor Logistics Support	178	180	200
Totals	**$833**	**$791**	**$994**

All figures are in Millions ($)

TOP 10 STRICOM CONTRACTORS:
(by dollar value)

- Lockheed Martin
- Raytheon Company
- SAAB AB
- Science Applications International Corporation
- DynCorp
- TRW Inc
- Madison Research Corporation
- Inter-Coastal Electronics
- SIGCOM Inc
- Northrop Grumman Corporation



PARTNERING PROGRAM

PARTNERING FOR SUCCESS

The STRICOM Partnering program is entering its fifth year of success in bringing together STRICOM, contractor and end-user employees, soldiers and officers to create an atmosphere of trust and effective program management. Used at any stage of contract performance, the Partnering program has created an atmosphere where there are no "surprises" in partnered contracts. To date, there has not been a single partnered contract where the contractor has filed any formal or informal claim against the government.

Through use of the Partnering workshops, follow-on action plans and monthly "accountability" teleconferences with our contractors and end-users, we have added a valuable "tool" to the STRICOM program management "toolbox."

PARTNERING FOR SUCCESS

STRICOM

WE ARE CURRENTLY PARTNERED ON THE FOLLOWING CONTRACTS OR PROGRAMS:

PROGRAM	COMPANIES
STRICOM Omnibus Contract (STOC)	All 33 STOC Contractors
OPS Directorate Overarching Life Cycle Contractor Support (LCCS) Partnership	AHNTA, Inc., Anteon Corporation, Dyncorp, L3 Communications and Raytheon Technical Services Co.
Virtual Training LCCS Contract	Dyncorp
Constructive Training LCCS Contract	Anteon Corporation
Artillery & Chemical Defense LCCS Contract	Ahtna Inc.
Live Training LCCS Contract	Raytheon Technical Services Co.
Aviation Training LCCS Contract	L3 Communications
Aviation Combined Arms Tactical Trainer	L3 Communications
AH-64A Combat Mission Simulator	TRW
Institute for Creative Technology Contract	Institute for Creative Technology

To learn more about the Partnering program, please contact
Harlan Gottlieb, STRICOM Chief Counsel
at Harlan_Gottlieb@stricom.army.mil or at 407-384-3513

EMPLOYEE MORALE AND WELFARE

♥ **SHAPE (Fitness Program):** Employees are now authorized by the Commander to participate in a monitored fitness program, resulting in improved employee lifestyles (9 people participated in FY01).

♥ **Blood Drives:** STRICOM conducts twelve blood drives per year. There were 567 pints collected in FY01.

♥ **Quarterly Commander's Call:** STRICOM conducts quarterly Commander's Calls for the entire workforce.

♥ **Junior Achievement:** STRICOM encouraged participation with the Junior Achievement Organization that works with local students and businesses to educate and inspire young people to value free enterprise, understand business and economics in preparation for the work environment.

♥ **CPR Training:** Eighteen STRICOM employees were successfully trained in CPR in FY01.

♥ **Breakfast with the Boss:** The Commander hosts quarterly, informal breakfasts himself and various members of the workforce to discuss STRICOM employee's concerns.

♥ **Command Surveys:** As a result of employee's concerns voiced in the Command Survey (January 2001), the command will provide added focus on job recognition, opportunities for promotion/job rotation, and training to help managers deal more effectively with poor performers.

♥ **STRICOM Total Employee Development (TED):** STRICOM took the initiative to automate the training process and provide all employees with a one-stop-shop for career information and planning. Collectively, STRICOM, ACALA, ASAALT and RDAISA are working closely to ensure the STRICOM workforce has the database to assist them in choosing needed training that fits STRICOM's strategic focus and the individual employees' needs.

♥ **Smoking Cessation:** STRICOM encourages employees to be involved in our Smoking Cessation program to assist them in their goal to stop smoking (8 employees completed this program in FY01).

♥ **Community Activities:** In keeping with the spirit of community activity, STRICOM employees participated in Hail and Farewells, Corporate Run/Walks, Golf Tournaments and Armed Forces Day.

"Eighteen STRICOM employees were successfully trained in CPR in FY01."

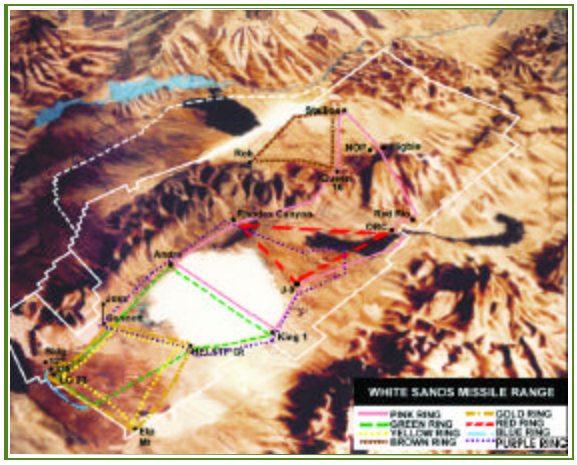
PROJECT MANAGER

INSTRUMENTATION, TARGETS & THREAT SIMULATORS

PROGRAM HIGHLIGHTS:

White Sands Missile Range - Test Support Network (WSMR-TSN):

❖ When completed (FY03) the White Sands Missile Range - Test Support Network will provide the broad bandwidth transmission capability to thoroughly test evolving Interim and Objective Force weapon systems under development by the U.S. Army, U.S. Navy and U.S. Air Force.



❖ In December 2001 the White Sands Missile Range - Test Support Network Management System achieved Initial Operational Capability.

"Mission support for several joint service efforts, especially PATRIOT (PAC-3) testing, was extremely successful."

Mobile Automated Instrumentation Suite (MAIS) C3 Upgrade:

❖ The Redesigned MAIS C3 Center will enable the Operational Test Command to collect significantly more Real Time Casualty Assessment (RTCA) data at a significantly lower cost to the Army.

❖ The MAIS C3 Center has been certified to be High Level Architecture (HLA) compliant. The core software of the system will be portable, extensible and modular and will utilize state of the art commercial software products.

Hardened Subminiaturized Telemetry & Sensor System (HSTSS):

❖ Capabilities developed by the HSTSS program have dramatically reduced the cost and size of telemetry systems. These capabilities will reduce munitions development costs through provision of needed telemetry data during Army flight tests of small caliber and smart munitions that support FCS.

❖ On-going delivery and validation of cost effective HSTSS components such as the S-Band transmitter are enabling the concept of embedded telemetry to become reality. HSTSS transmitters, encoders, batteries, and antennas successfully acquire and transmit on-board data from launch to impact of munitions, following a 30,000 g-force launch.

Aerial Target Flight Services (ATFS) Program:

❖ During 2001, the TMO's Aerial Target Flight Services (ATFS) program provided a variety of support for U.S. Army Air Defense Training, Tri-Service Test and Evaluation, and Foreign Military Sales commitments. Mission support for these joint service efforts, especially PATRIOT (PAC-3) testing, was extremely successful.

❖ A total of 357 missions were flown during 2001 using the MQM-107, BQM-34, QH-50, QUH-1, LTMS, and AH-1 target systems.This mission support was conducted at various CONUS/OCONUS ranges.

❖ OCONUS flight services support to Taiwan was provided through a Remotely Piloted Vehicle Trainer (RPVT) at Chiu Peng Range, Taiwan.

MQM-107 Target Support:

❖ MQM-107 target support for the Royal Saudi Air Defense Forces (RSADF) continued during 2001. Live fire training exercises were conducted at four different ranges within the Kingdom.

❖ Ninety-four missions were flown at Hafr Al-Batin, Tabuk, Khamis Mushyat, and Jeddah sites. Eleven different weapon systems engaged a variety of tow targets pulled by the MQM-107 drone aircraft.

Electronic Order of Battle Environment Generation System (EOB-EGS):

❖ EOB-EGS is a Resource Enhancement Project (REP) funded program supporting the Marine Corps Operational Test and Evaluation Activity (MCOTEA). The program involves the design, development, fabrication, and validation of a system capable of emitting a variety of complex and realistic electronic signals.

❖ EOB-EGS successfully participated in MCOTEA's test of the Mobile Electronic Warfare Support System (MEWSS) in July 2001.

> "EOB-EGS successfully participated in MCOTEA's test of the Mobile Electronic Warfare Support System (MEWSS) in July 2001."

MEDIA EXPOSURE:

❖ The Virtual Targets Center (VTC) was demonstrated during the **STRICOM Capitol Hill Senate Demonstration 2001**. The VTC, a collaborative effort between STRICOM's Virtual Targets Program and the AMCOM RDEC, provides Virtual Targets and other modeling and simulation support to the DoD modeling and simulation community.

❖ The Virtual Targets Team demonstrated the Virtual Targets Center at the **Simulation & Modeling Acquisition Requirements Training (SMART) Conference**, 16-18 Apr 01, in Orlando, FL. The Conference attendees were enthusiastic about the Virtual Targets Center, with 10 applying for access on the spot and several more expressing their intention to apply on-line. Attendees also provided excellent feedback and additional contacts for follow-up.

RBS-70 Program:

❖ The RBS-70 represents the state of the art in laser beam riding missiles systems and is not susceptible to any known countermeasures.

❖ In June 2001, the Threat Systems Management Office (TSMO) took delivery of the RBS-70 laser beam-riding surface-to-air-missile (SAM) system that was acquired through the Foreign Commercial Purchase (FCP) program. The trainer set will be used for operator proficiency training and will also be integrated into the virtual simulation environment for use in live virtual, constructive simulation training exercises.

CONTRACT AWARDS:

❖ Ericsson Microwave Systems AB was awarded on 29 June 01, a sole source contract by the Threat Systems Management Office (TSMO) to provide up to three **Giraffe Agile Multi Beam (AMB) Radar systems**. The Giraffe AMB is the latest member of the highly successful Giraffe radar family and represents the state of the art in 3-dimensional radar systems. The G-AMB will be employed for use in Operational Testing and Training.

❖ The Targets Management Office (TMO) awarded Taos International, Inc. a competitive small business set-aside contract for the **Splav 300 mm BM 9A52 (12 round) SMERCH Multiple Rocket System** on 30 April 2001.

❖ Coast Metal Craft, Inc. was awarded a competitive small business set-aside contract for **Ballistic Aerial Targets** on 30 July 2001 by the TMO.

❖ Raytheon Aircraft, Inc. was awarded an FMS source-directed contract by the TMO for the **MQM-107B Aft Fuselage** on 6 August 2001.

❖ Herley Vega, Inc. was awarded an FMS source-directed contract by the TMO for the **Magic2 System** on 27 September 2001.

❖ The TMO awarded Raytheon Aircraft, Inc. an FMS source-directed Contract for **MQM-107 Spares** on 28 September 2001.

❖ Austin Precision Products Incorporated, a small business located in Leander, TX was awarded a contract for **300 Sniper Targets in support of "Operation Enduring Freedom"** on 15 Oct 01 by the TMO.

PERSONNEL UPDATES:

❖ The article entitled; "Threat Materiel Solutions for Army Acquisition" was approved for publication in the November - December 2001 issue of Army AL&T Magazine. The article, written by **Jeffrey Langhout** of TSMO, describes the Threat Simulator/Simulation Program Plan (TSPP) which gathers all requirements for threat simulators and simulation to be used in testing of Army systems.

❖ **Minh Vuong** co-authored a paper, "Foundation Initiative 2010: The Design of the Second TENA Middleware", Prototype that was chosen for the 2001 Fall Simulation Interoperability Workshop Recommended Reading list.

❖ **LTC Alvin Brown**, Deputy Director, completed the Advanced Program managers Course, Defense Acquisition University, in August 2001.

❖ **Vickie Sullivan** departed the TMO in November 2001 to accept a promotion in the AMCOM Acquisition Center.

❖ **Kathleen Leonard**, Project Director for the New Generation Army Targetry System (NGATS) graduated for the Naval Postgraduate School in December 2001 with a Master of Science Degree in Program Management.

❖ **Teresa Tucker** departed in the TMO in December 2001 for reassignment to the Engineering Directorate, AMCOM Research Development and Engineering Center (RDEC) after nine years of service in the TMO, and six years as the Chief of the Business Office.

❖ **J.B.Hagan**, Chief, Financial Management Team, Business Office retired from Federal Service on 31 December 2001 after serving nine years in the Targets Management Office.

❖ From the Instrumentation Management Office, the following personnel graduated from the Webster University MBA program in May 2001: **Minh Vuong, Craig Janisz, Bob Arora, and Lorraine Castillo**.

MEDIA EXPOSURE

❖ The TMO provided a significant presence at the **National Defense Industrial Association's (NDIA's) Air Targets, UAVs, and Range Symposium and Exhibition** held 2-5 Oct 01 in Sparks, NV. TMO personnel presented two briefings and provided manning and major support of three exhibits: Aerial Target Operations, Virtual Targets, and the OSD Threat Systems Office.

❖ The TMO participated in the **International Test and Evaluation Association (ITEA) Conference** held 30 Oct - 2 Nov in Cincinnati, OH. TMO members were on hand to exchange information pertaining to functions and capabilities associated with the TMO and servicing the Test and Evaluation community.

PROJECT MANAGER

COMBINED ARMS TACTICAL TRAINERS

MISSION

Manage the Development, Acquisition, Fielding, and Life Cycle Support of the Virtual Synthetic Environment and associated Training Aids, Devices, Simulators, and Simulations (TADSS) to Support Individual, Institutional, and Collective Training.

COMBINED ARMS TACTICAL TRAINERS (CATT) -
CATT refers to a group of high-fidelity, interactive, manned simulators; command, control, and communications work-stations; exercise control stations, After Action Review systems and the Virtual Combined Arms synthetic environment to support virtual training up to battalion/task force level. CATT virtual synthetic environment includes large scale virtual terrain representation with natural synthetic environment effects (e.g., weather effects), accredited computer generated forces (CGF) replicating adjacent, supporting, and opposing forces (combat, combat support, and combat service support elements).

Assistant Project Manager Close Combat Tactical Trainer (APM CCTT):

Close Combat Tactical Trainer (CCTT) is the first member of the Combined Arms Tactical Trainer (CATT) family of virtual, distributed interactive simulations (DIS) for collective training. It supports the training of Armor, Mechanized Infantry, and Cavalry units from platoon through battalion/squadron echelon, including the staff. The primary training audience operates from both full-crew simulators and mock-up command posts. Crewed simulators - M1A1, M1A2, M1A2 SEP, M2A3, M2/3A2 Bradley Fighting Vehicle (BFV), BFIST, FIST-V, M113A3, M93 FOX, and HMMWV - are of sufficient fidelity to require individuals and crews to correctly perform their respective tasks in order to successfully accomplish their collective missions. Modules at Ft. Hood, TX are equipped with Force XXI Battle Command Brigade and Below (FBCB2). Infantry platoon and squad leaders can also exit their BFV and move to a Dismounted Infantry work-station where they can control their virtual dismounted elements. Commanders and staff members of the training audience use computer workstations located in mock-up command posts to provide artillery, mortar, combat engineers, and logistics units to the synthetic battlefield. The units created and controlled from these workstations require the training audience to plan for and coordinate the implementation of other Battlefield Operating Systems in support of their tactical maneuver. Semi-Automated Forces (SAF) workstations provide additional supporting units (i.e., aviation and air defense artillery) and all opposing forces. Thus, while maneuver units (combat crews and battalion-level staff members) constitute the CCTT primary training audience, all Battlefield Operating Systems are represented in the simulation to ensure quality training within a combined arms training environment - under daylight, night, and fog conditions. CCTT's visual and terrain databases currently support desert (NTC), temperate (Germany), Ft. Hood TX, Kosovo, and Korea. Mobile versions of CCTT are used to train the National Guard and are capable of deploying with a unit during contingency operations.

PROGRAM STATUS:

The initial operational capability for CCTT was achieved in June 1998. Low Rate Initial Production efforts began in Jan 1998 and provided hardware deliveries to Ft. Knox, Ft. Benning and CCTT mobile sets in FY99. The ASARC Milestone III was achieved in Nov 1998. Full Rate Production (FRP) efforts began in Jan 1999 with fieldings in FY00 to CCTT sites at Ft. Stewart, Ft. Hood, Ft. Carson

"APM CCTT Mission - Develop, Field and Sustain High Quality Combined Arms Collective Training Devices that meet or exceed Virtual Warfighter's Training Requirements for the Legacy, Interim and Objective Force."

CCTT PROJECTED ACTIVITIES:

❖ FY00 FRP of CCTT modules continued with FY01 fieldings to Ft. Carson, Ft. Riley, and mobiles. CCTT fieldings in FY02 will include sites in Germany and Korea.

❖ Developed Battlefield Combat ID System (BCIS) and will field in CCTT concurrently with BCIS fielding.

❖ Continue development on the Bradley FIST variant kit (Fielding 2QTRFY02).

❖ Continue development on Dismounted Infantry and AAR components of CCTT.

❖ Continue interoperability development with Crusader and Comanche simulators.

❖ Continue to support development of the M93 FOX CCTT module (Fielding 2QTRFY02)

(partial), and additional mobile sets. Force XXI Battle Command Brigade and Below (FBCB2) is operational at the Ft. Hood CCTT Site 1 and in the M1A2 SEP modules in Site 2. CCTT was used for the train-up for the FBCB2 operational test and to support the Battlefield Combat ID System (BCIS) Operational Assessment.

AWARDS:

- The CCTT program was awarded the 2001 DoD Value Engineering Team award and the 2001 AMC Value Engineering Team award.

FIELDING EVENTS:

❖ Developed a version of CCTT that runs of the Linux Operating system. The Linux operating system is more aligned with current computer industry developments than the existing AIX operating systems allowing CCTT to better leverage off industry improvements.

❖ Achieved HLA compliance via a Gateway

❖ Added 27 New Light Infantry Behaviors to CCTT SAF

❖ Completed full site fielding and production verification test on schedule at Ft. Carson, CO and Ft. Riley, KS.

❖ Completed fielding and production verification test on schedule for California National Guard Armor mobile set.

❖ Completed installation and test of additional M1A2 SEP capability for Ft. Hood, TX and Ft. Knox, KY.

❖ Completed transition of the entire CLS program from prime contractor LMIS to the VT LCCS contract.

ASSISTANT PROJECT MANAGER SPECIAL OPERATIONS FORCES TRAINING SYSTEMS (APM STS):

Formation of APM STS -STRICOM has supported Army Aviation Special Operations Forces since 1988 with the initial procurement of the MH-47E and MH-60K Combat Mission Simulators and the follow-on procurement of concurrency and training enhancement upgrades

for these simulators. STRICOM has also supported USSOCOM in the procurement of simulators for Air Force Special Operations Command since 1996. In 1999 the two separate offices supporting SOF training system procurements were consolidated under the Product Manager Air and Command Tactical Trainers within PM CATT. In October 2000 a Memorandum Of Agreement was established with USSOCOM which established Team Orlando (includes STRICOM, the Naval Air Warfare Center-Training Systems Division (NAWC-TSD), the U.S. Air Force Agency for Modeling and Simulation, and the Marine Corps Program Office) as the preferred procurement agent for USSOCOM training systems. In December 2000 the APM STS office was established under the Project Manager Combined Arms Tactical Trainers. Within APM STS there is a project director for Army SOF programs, Air Force SOF programs and a NAWC-TSD project director detailed to APM STS for maritime SOF programs. With this structure, APM STS provides a single point of contact to USSOCOM for assigned training system acquisitions and having Team Orlando oversight, APM STS is able to easily leverage the programs and technologies of the other services to satisfy the SOF Warfighters training and simulation requirements.

"APM STS Mission - Develop, Field, and Sustain High Quality Virtual and Constructive Mission Training and Rehearsal Systems that Meet the SOF Warfighters' Requirements."

Army SOF Training Systems (STS)

❖ Completed Simulator Block UpDate (SBUD) VIII - MH-47E/MH-60K CMS Instructor/Operator Station Upgrade.

❖ Completed SBUD VIIIa - MH-47E CMS Visual Display System Replacement

❖ Continue to execute SBUD IX - MH-47E/MH-60K CMS Trainer System Enhancements

❖ Continue to execute SBUD IXt - MH-47E/MH-60K CMS TopScene visual system upgrade.

❖ Executed contract award for SBUD Xa - MH-60K CMS Visual Display System Replacement

❖ Preparing for contract award of SBUD X - MH-47E/MH-60K Integrated Avionics System (IAS) ver. 14.2 upgrade.

❖ Preparing for contract award of the Army Special Operations Aviation Training And Rehearsal Systems (ASTARS) contract. This contract will include:

- Light ASsault/Attack Reconfigurable (LASAR) Combat Mission Simulator for the AH/MH-6 "Little Bird"

- Conduct requirements analysis and concept explorations for Army Special Operations Aviation related simulation and simulator issues to support SOF training and mission rehearsal requirements.

Air Force STS

❖ Continue execution of the ADST II delivery order (DO) for the AC-130U Aircrew Maintenance Training Device and Test Bed (ATD/TB).

❖ Includes high fidelity independent and networkable simulators for the flight deck, navigator/fire control officer station, and the Infra Red/All Light Level TV station.

❖ Continue execution of the ADST II DO to add PC based Image Generators to the MC-130E Weapon System Trainer (WST) and the MC-130E Mission Rehearsal Device (MRD) for out-the-window visual imagery.

❖ Continue execution of the ADST II DO for the concurrency upgrade to the AC-130H crew station trainer.

❖ Awarded the SOF Requirements Analysis, Prototyping, Training, Operations, and Rehearsal (RAPTOR) contract to NLX Corporation of Sterling, VA. The SOF RAPTOR contract is a competitively awarded contract with a broad statement of work that allows APM STS to quickly satisfy SOF training and simulation requirements. The initial efforts on this contract include the instructors, operation, and maintenance for AFSOC's four Special Tactics Air Traffic Control (STATC) trainers located in three CONUS locations; and laboratory engineering operations and support for the SOF Simulation Interoperability Laboratory (SOF SIL).

Special Operations Forces Simulation Integration Laboratory

❖ Maintain, evaluate and develop SOF Distributed Interactive Simulation (DIS), High Level Architecture (HLA), Runtime Infrastructure (RTI) Services, Federation Management and Performance Metrics

❖ Support and develop Simulated Radios, Weather Environment, and SOF Computer Generated Forces with classified parameters for the Electronic Combat Environment and Damage Assessment

❖ Support Distributed Mission Training (DMT) and Rehearsal Environment and Monitor Joint Technical Architecture (JTA)

❖ Support distributed exercises and After Action Reviews

❖ Conduct Trade Studies, Rapid Prototyping, and Simulation Based Acquisition (SBA)

❖ Searched for facilities in close proximity to STRICOM suitable for a classified laboratory.

❖ NAWC-TSD provided 1400 sq. ft. suitable for conversion to a classified laboratory.

❖ Conversion to a limited access, classified laboratory is in progress.

STS MOD Manager

❖ Developing a web accessible database of all SOF training systems and their detailed configurations. Database will:

- Capture configuration data for all SOF simulators
- Track proposed or installed modifications to SOF simulators
- Track in-depth information/funding requirements for modifications to assist present and future planning.
- Continue to develop and populate the SOF training systems database.

PRODUCT MANAGER AIR AND COMMAND TACTICAL TRAINERS (PM ACTT):

PM ACTT Vision - To be the World's Best Product Management Team for Air and Command Tactical Trainers, In Partnership With Industry, Supporting Army Warfighters Today Through Transformation to the Objective Force.

Air and Command Tactical Trainers (ACTT) Program Management Office - Responsible for all Synthetic Flight Training System simulators as well as system and non-system training aids, devices, simulators and simulations for: Aviation, Air Traffic Control, Air Defense, Intelligence and Electronic Warfare, and Command and Control. Projects include various high fidelity flight, weapons, combat mission simulators, part task trainers and maintenance trainers. Aviation systems supported are the Aviation Combined Arms Tactical Trainer (AVCATT-A), AH-64A Apache Combat Mission Simulator (CMS), UH-60A/L Blackhawk Flight Simulator, CH-47D Chinook Flight Simulator, OH-58D Kiowa Warrior Crew Station Mission Equipment Trainer (CSMET) and Cockpit Procedure Trainer - Image Generator (CPT-IG), and the Enhanced Tower Operations Simulator (ETOS).

AIR FORCE STS PROJECTED ACTIVITIES INCLUDE:

❖ Procurement of a replacement for the four, obsolete, unmaintainable STATC trainers (STATC II).

❖ Analysis and development of expanding STATC II into a Special Tactics Air Ground Integrated Simulation (STAGIS).

❖ Develop a high fidelity, AC-130U Electronics Warfare Officer (EWO) simulator to provide individual training or networked with the flight deck, NAV/FCO, and IR/ALLTV station trainer for full mission training.

"PM ACTT Mission - Develop, Field and Sustain High Quality Air and Command Virtual Training Devices that Meet or Exceed our Warfighter's Requirements."

Lift Simulator Modernization Program (LSMP)

Planned upgrade to the 6 CH-47D and 18 UH-60A/L Flight Simulators (FS) currently in the U.S. Army inventory. New capabilities to be implemented at all FS locations during the LSMP program include a new visual terrain database with geo-specific local instrument gaming areas, full operational capability for the ARC-220 radio, and Un-Interruptible Power Supply (UPS) and power conditioning capability. CH-47D FS will receive a new host computer, additional visual channels to support continuous chin windows, additional visual animations, and additional FADEC malfunctions. UH-60 FS will receive new cockpit OTW monitors. The LSMP updates are expected to begin in FY03 and be completed by FY06.

Aviation Combined Arms Tactical Trainer - Aviation Reconfigurable Manned Simulator (AVCATT-A)

A dynamic, alternative instructional concept to rehearse and participate, through networked simulation, in unit collective and combined arms simulated battlefield environment. AVCATT-A is a critical element of the Combined Arms Training Strategy (CATS) and supports institutional, organizational, and sustainment training for both Active Component (AC) and Reserve Component (RC) aviation units worldwide. Simulated collective and combined arms exercises will provide commanders with an affordable capability to hone and sustain acceptable individual performance levels required to support unit collective training and rehearsals, and combined arms wartime mission performance requirements. AVCATT-A provides a realistic, high intensity task loaded combat environment. Each AVCATT-A suite will consist of 6 cockpit mockups (manned modules), a BattleMaster Control and Role Player area, and an After Action Review (AAR) area. Manned modules represent the AH 64A Apache, AH 64D Longbow Apache, RAH 66 Comanche, OH58D Kiowa Warrior, UH 60A/L/K/Q Blackhawk, and CH 47D Chinook aircraft platforms.

SIGNIFICANT ACCOMPLISHMENTS AND EVENTS:

January 2001
Deliver OH-58D CPT-IG #1 to SED Huntsville

March 2001
AVCATT-A Build 1 Blackhawk UH-60A/L

May 2001
Award of AH-64A Apache CMS Upgrade Contract

May - July 2001
Eighth U.S. Army UH-60A/L FS and CH-47D FS RFT

June 2001
AVCATT-A Build 2 Chinook CH-47D

June - September 2001
OH-58D CSMET #13-15 RFT

August 2001
Deliver OH-58D CPT-IG #2 & #3 to SED Huntsville

August 2001
Lift Simulator Modernization Program (LSMP) STOC Notice

August 2001
Improved Moving Target Simulator (IMTS) Contract Award

September 2001
AH-64A Apache CMS Preliminary Design Review

September 2001
AH-64A Apache CMS Team Initial Partnering Session

September 2001
Ft. Campbell Follow-on UH-60A/L FS and CH-47D FS RFT

PRODUCT MANAGER GROUND COMBAT TACTICAL TRAINERS (PM GCTT):

Engagement Skills Trainer 2000 (EST 2000)

- Fielded the first Army Transformation TADSS to Ft. Lewis with the delivery and acceptance of two 15-lane systems to Ft. Lewis in April 2001.
- Fielded 76 systems in FY2001. First two systems were delivered to Ft. Benning in March 2001

Fire Support Combined Arms Tactical Trainer (FSCATT)

- Display of the FSCATT Towed (FSCATT-T) prototyped at Fire Support Conference at Ft. Sill
- Display of the FSCATT-T at NGAUS convention at Indianapolis, IN
- Award of the Modular Artillery Charge System (MACS) contract (SEP)
- Award of the Software Support Package contract (SEP)
- ABC Primetime and CNN segment including FSCATT demo

Guardfist II (GFII)

- Display of the new 1:4 GFII system at NGAUS convention at Indianapolis, IN
- Award of the Windows/Hardware upgrade (SEP)

PM ACTT PROJECTED ACTIVITIES FOR FY02:

- Conduct AVCATT-A Team Initial Partnering Session
- Complete OH-58D CSMET #16 and 17 RFT
- Issue Enhanced Tower Operation Simulator (ETOS) RFP
- Develop Flight School XXI Simulation Acquisition Strategy
- Enhanced Tower Operation Simulator (ETOS) Contract Award
- Lift Simulator Modernization Program (LSMP) Contract Award
- AVCATT-A IOT&E and Milestone C Decision

"PM GCTT Mission - Develop, Field, and Sustain High Quality Ground Combat Virtual Training Devices that Meet or Exceed our Warfighters' Requirements."

Advanced Concept Research Tools (ACRT)

- ACRT (PC Based) Ground Vehicle award under STOC to TRW/Raytheon (APR)
- ACRT Dismounted Infantry award under MOUT ID/IQ to AIS/RBD (APR)
- ACRT program transitioned from PM STI to PM CATT (MAY)

Recognition of Combat Vehicles (ROC-V)

- PM GCTT assumed management of ROC-V training CD
- Initiated Phase I with PM ITTS/TMO to port to .www (May)
- ROC-V Conf held at Ft. Belvoir with cross-service representation to establish thermal ID requirement

Wolverine Drive Mission Trainer Proof of Principle

- Successful demo of the Wolverine DMT PoP w/PC Image Generator and electric based motion platform, and UK CATT data-base at LMIS
- Final Report, including System Specification submitted for Wolverine DMT PoP

Maintenance Training System (MTS)

- Delivery of one set (1 IOS & 6 SS) of M270A1 Desktop Trainers to Redstone Arsenal, Alabama (JUL)
- Delivery of two M270A1 Mockups to Redstone Arsenal (JUL)
- Delivery of 1 IOS and 12 M1A2 SEP Desktop Trainers to Fort Knox, Kentucky. (JUL)
- Front end analysis completed for IAV (part of BCT), study under way.
- Requirements study and funding analysis under way for DLS direct support maintenance trainer.

Advanced Gunnery Training System (AGTS)

- Award of AGTS for 6 M1A2 SEP trainers w/ spares
- DCX support to 4ID at Fort Irwin, CA
- Fielding of 4 x M1A2 SEP trainers to 1st CAV DIV prior to their NET (APR)
- Display of AGTS with redesigned mobility subsystem, PC IG and Computer Generated Forces capability at Armor Conference

AFIST XXI

- Beta system fielding for 6 systems to 6 different NG units (MAR-APR)
- Display of system at NGAUS convention at Indianapolis, IN

University of Mounted Warfare (UMW)

- Delivered 4 x SA SAF Suites to Fort Knox, Skidgel Hall and completed training to instructors (JAN)
- Briefed Director of the Armor School and instructors on capabilities of the CCTT SAF Suite with demo of 3D-Viz

PICTORIAL HIGHLIGHTS:

The **Wolverine Proof of Principle Drivers Mission Trainer** culminated a successful demonstration on 1 Aug 2001. With minimum funding, we were able to show four important capabilities to SME Wolverine Drivers and PM Wolverine.

COL Ted Johnson, PM SOLDIER SYSTEMS, shoots the Engagement Skills Trainer as part of a visit to STRICOM/PM GCTT on 18 October 2001.

PM IAV requested PM GCTT perform a driver training and maintenance training study to determine what the requirements would be to adequately train operators and maintainers on the IAV wheeled vehicles. The Requirements Determination was begun in 14 SEP 2001 and is scheduled for completion in 2002. Shown below is part of the data collection done at White Sands Proving Grounds.

Our **PM GCTT 14th Annual ARD Bowl** in celebration of the work provided by our matrix support personnel and our TADSS contractors was well attended.

FMS ACTIVITY DURING 2001:

Egypt :

- M60A3 & M1A1 Platoon AGTS - FEB 01 (delivered systems)
- Tank Driver Trainer (TDT) - May 01 (delivered system)

New Business:

- Czech Republic GUARDFIST Upgrades
- New Egypt M1A1 Platoon AGTS
- Training device upgrades to Egypt

Potential New Business:

- Conducted Market Surveys for SANG:
  - Battle Staff Trainer
  - Assault Gun Trainer
- Saudi M1A2 (SWORD) - New Devices and Upgrades

PROJECT MANAGER

FOR TRAINING DEVICES

Division Capstone Exercise (DCX): The Division Capstone Exercise objective was to fully demonstrate the 4th Infantry Division's go-to-war capability under a realistic and demanding force projection scenario. It was also an opportunity for the Army to evaluate experimental training systems in real-world combat situations. This exercise took place in Mar/Apr 01 at the National Training Center, NTC, at Ft. Irwin, CA. PM TRADE, in an oversight role, ensured the following was available to support the exercise:

- SAWE/MILES II kits (52) for the Bradley M2A3.
- Instrumentation of 16 Kiowa Warriors for the DCX.
- Distributed Interactive Simulation (DIS) Translator.
- Lower FTI installed at Ft. Hood in support of training.
- CCTT FBCB2 software ver 3.3 training prior to rotation.

Fixed Tactical Internet (FTI): Completed FTI Initiative at Ft. Hood for the Lower Fixed Tactical Internet and initiated Fixed Tactical

Internet activities at Ft. Lewis, WA.

Live Training Transformation (LTT): LTT encompasses a complete modernization of the systems, methodologies and employment strategies in the live training domain to better support the Objective Force. Each MCTC will be overhauled, and new capabilities will be developed for HITS, DMPRC and MOUT. The first contract within the LTT is for the development of the Common Training Instrumentation Architecture. The first spiral development for this architecture was completed with the delivery of version 0.1 in September 2001.

The Maneuver Combat Training Center/Army Battle Command System-Integration (MCTC/ABCSI): The MCTC/ABCSI system provides the solution to fill the digital training gap at the MCTCs as digital messaging platforms (ABCS and legacy ATCCS) are being fielded to the Army and Joint Forces. MCTC/ABCSI completed development of the automated digital after action review (AAR) piece of the system. The completed system is moving into the testing phase in preparation for fielding to the Joint Readiness Training Center (JRTC) in February 2002, National Training Center (NTC) in June 2002, and Combat Maneuver Training Center (CMTC) in September 2002.

Common Training Instrumentation Architecture (CTIA):
CTIA is a component-based open-systems architecture that supports a wide live training user base, technology insertion, flexible operational concepts, interoperability, and rapid response to new requirements. The characteristics that set the CTIA apart from other architectures are:

- Commonality - Reduces Development and Procurement cost, and promotes reuse.

> "The MCTC/ABCSI system provides the solution to fill the digital training gap at the MCTCs as digital messaging platforms (ABCS and legacy ATCCS) are being fielded to the Army and Joint Forces."

"The CTIA development contract was awarded 13 March 2001 and the first build was delivered 30 September 2001. CTIA contractor is Lockheed Martin Information Systems, Orlando, FL under the STOC."

❖ Modularity - Reduces lifecycle support and maintenance costs, improves Reliability, Availability and Maintainability (RAM).

❖ Openness - Avoids obsolescence, leverages COTS, and enables technology insertion.

❖ Interoperability:

- Live/Virtual/Constructive - Increases training opportunities, enhances each domain.
- Simulation to C4ISR - Sustains "digital" skills, enables IO/EW training.
- Joint/Coalition - Train as we fight.
- Test and Training - Reduce costs.

❖ Extensibility - Enables modernization, reduces fielding time for new requirements, enables embedded and deployed training.

The CTIA development contract was awarded 13 March 2001 and the first build was delivered 30 September 2001. Following is a description of the first build. CTIA contractor is Lockheed Martin Information Systems, Orlando, FL under the STOC.

National Training Center Range Communications System (NTC RCS): STRICOM has a requirement to replace/renovate the RDMS and OCCS with the RCS at the National Training Center (NTC), Fort Irwin, CA. The RDMS (Range Data Measurement Subsystem) collects and distributes digital training data from the Tactical Engagement Simulations (TES) to the appropriate components of the IS (Instrumentation System) and disburses the outbound data from the IS to the appropriate entities. The RDMS reports the position location of the instrumented participants in CTC exercises, with weapons engagement, and other event data, to the CIS via an integral data link and associated interfaces. The RDMS integral data link (radio component) is two-way, thereby providing the means to send CIS-generated commands and other control messages to the instrumented participants. (The existing RDMS at the NTC has reached the end of its useful service life and is no longer cost effective to support.) The RDMS is a single point of failure for the CIS.

The OCCS (Observer Controller Communications System) provides the voice communications link for the Observer Controllers in the exercise area and the Analysts at the CIS. It also provides the communication capability for Post support and Safety activities.

The NTC RCS has a modular and open architecture. It uses the same network infrastructure for data and voice communications. It interfaces with the CIS using the existing LAN structure for network setup,

management, and control from the CIS. It uses the Transmission Control Protocol - Internet Protocol (TCP/IP). The RCS Gateway(s) includes redundancy to the extent that there is no single point of failure that results in an interruption of over one-minute of voice or data flow or prevents the real-time control and monitoring capability for over five minutes.

The NTC RCS will have sufficient throughput capacity to accommodate 5,500 participants (3,000 OCCS and 2,500 RDMS threshold) and 10,000 (6,000 RDMS and 4,000 OCCS objective) participants.

STRICOM awarded the contract for the RCS effort to SAIC on 20 June 01.

Combat Maneuver Training Center Range Data Measurement System/ Renovation (CMTC RDMS/R):
The RDMS/R program renovates the current CMTC RDMS to prevent a catastrophic failure and prolong the life cycle of the RDMS until the CMTC Objective Instrumentation System is fielded. The original RDMS was installed in 1992 as an integral part of the CMTC-IS, with a useful lifetime of 7-10 years. It relays Tactical Engagement Simulation System (TESS) data from & to exercise players and the Core Instrumentation Subsystem. Currently, some essential spare parts are difficult to find or non-existent as they are no longer produced.

The RDMS/R replaces Logic Modules, Player Units Data Contol Interface (DCIs) and other essential hardware, and modify software to integrate replacement components. Since the RDMS is a single point of failure for the CMTC-IS, this project will significantly reduce the risk of RDMS failure and prolong the RDMS' life until the OIS is fielded in FY09-10.

Digital Multi-Purpose Range Complex (DMPRC): The Digital Multi-Purpose Range Complex (DMPRC) live and simulated fire range will replace obsolete and inadequate targetry in order to stimulate new weapon systems, stress Warfighters, and provide enhanced training data collection and After Action Review (AAR) capabilities. The DMPRC will incorporate digital system training as well as integrate multiple ranges and training environments for the training units. STRICOM is the Material Developer for the DMPRC. PM TRADE has the Lead for the program.

The DMPRC will be fielded by leveraging successful systems designed for the training and testing communities. It will maximize Commercial-Off-The-Shelf (COTS) hardware and software to meet Army requirements for state-of-the-art live training systems. A complete Life Cycle Analysis is being performed to ensure that the solution will provide a system that is cost effective and satisfies all requirements.

"The DMPRC will be fielded by leveraging successful systems designed for the training and testing communities."

The DMPRC will support live fire exercises (LFX) for individual and crew served weapon skill qualification and sustainment, and collective training events at local training areas, combat training centers, and in tactical force projection environments (Tables VIII and XII). Range Operations (ROPS) personnel will use training exercise scenarios to prepare the DMPRC for exercise execution. During exercise execution, ROPS personnel will use the new generation range subsystems to provide realistic friendly, neutral, and threat simulations. The instrumentation will collect audio, video, digital training, exercise execution, and Real Time Casualty Assessment (RTCA) data to support DMPRC subsystems for training data analysis, preparation, presentation, feedback for the AAR and the Take Home Package. The DMPRC will be a live, virtual and constructive gunnery and tactical complex that allows for individual, crew, platoon, and Combined Arms Live-Fire Exercises (CALFEX) that incorporate digital information systems.

The DMPRC will be an evolutionary system of systems, rather than a revolutionary end state. The DMPRC will serve as the starting point for a common family of products being developed by STRICOM known as the Common Training Instrumentation Architecture (CTIA). The DMPRC will support the definition and the development of the CTIA. The Objective phase of the DMPRC will be fully CTIA compliant. The DMPRC at Ft. Hood will become the basis for controlling enhancements and integration requirements for future DMPRC ranges.

Ft. Hood is the first DMPRC being fielded. IOC scheduled for Jan 04.

Military Operations on Urbanized Terrain Instrumentation and Training Devices Working Group (MOUT I&TDWG): The MOUT Instrumentation & Training Device Working Group (composed of the User, Material Developers and Industry Partners) will further efficient and effective management of the materiel acquisition and sustainment activities supporting MOUT training by leveraging resources, technology, and good ideas and ensure, to the maximum extent possible, horizontal technical integration of MOUT training devices and instrumentation.

In 2001, the MOUT I&TDWG broadened its spectrum of participants to include the STOC contractors and Army Range systems to further expand the dissemination of information and commonality.

"In 2001, the MOUT I&TDWG broadened its spectrum of participants to include the STOC contractors and Army Range systems to further expand the dissemination of information and commonality."

A particular focus for this year within the I&TDWG is on the technologies associated with advanced position systems. The MOUT I&TDWG is broadening the domain from solely MOUT to include Combine Arms Collective Training Facility (CACTF) Urban Assault Courses (UAC), Battle Assault Courses (BAC), Digital Multi-purpose Training Range (DMPTR), Breach Facilities and Shoot-Houses to more adequately focuses on the total training range.

Multiple Integrated Laser Engagement System XXI: MILES XXI is the follow-on production procurement of the MILES 2000 training systems. MILES XXI is a force-on-force training system used by both dismounted infantry and mobile weapon crews to increase both combat readiness and fighting effectiveness.

MILES XXI uses laser light in the form of pulses to transmit weapon information to a target. These pulses are transmitted each time a weapon is fired. Information contained in the pulses includes the player ID and the type of weapon used. The target entity processes the information to produce a casualty assessment.

The casualty assessment for a dismounted soldier can produce a state of killed or wounded. The casualty assessment for a mobile weapon system can produce several outcomes, which include catastrophic kill, mobility kill, and communication kill. Both dismounted soldiers and mobile weapon system platforms are equipped with a laser transmitter and laser receiver.

The ability to support an After Action Review is an essential feature of the MILES XXI training system. This is possible because all player activity is recorded during an exercise.

A Delivery Order was awarded to Lockheed Martin Information Systems in May 2001 for Low Rate Initial Production. Production and in-plant testing have proceeded on all MILES XXI configurations.

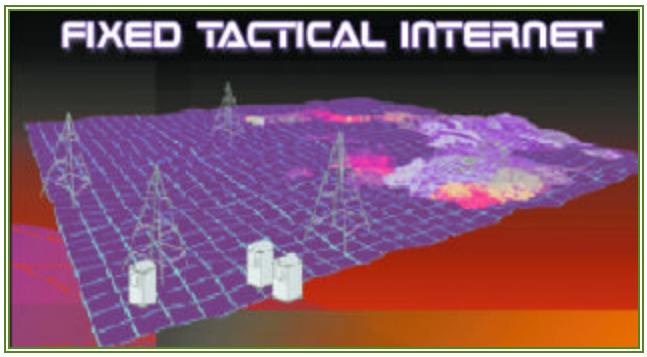
MOUT I & TDWG OBJECTIVES:

- To share information and good ideas
- To leverage technology and acquisitions
- To solve complex and/or common problems
- To reduce acquisition and sustainment costs
- To synchronize and integrate the collective efforts
- To foster HTI through commonality and standards
- To support the objectives of the MOUT Training Strategy

OneTESS:

The OneTESS team was formed in December 01. OneTESS is a family of compatible live environment engagement capabilities that replicate weapon effects of combat systems in the conduct of collective training. Until the R&D funds begin in FY03, the OneTESS team is busy pulsing industry for emerging technologies. OneTESS is focused on advancing the state of tactical engagement simulations to provide training fidelity for the latest weapon system capabilities. The new technology will be applied to produce prototypes for the Block I programs that will focus on Indirect Fire / Non-Line of Sight, Direct Fire, the Individual Soldier, Combat Vehicles, and Aircraft. Additionally, OneTESS will be closely linked to the CTIA effort and coordination is ongoing.

The Systems Integration Test will be conducted at Fort Polk, LA in April 2002. A limited number of MILES XXI systems (370 vehicle kits) were also procured to support the testing and training of the Interim Brigade Combat Team.



FixedTactical Internet (FTI):

FTI is a digital data radio backbone network, which provides the division a realistic training environment by replicating the tactical internet with virtual and constructive simulations. This alleviates the training requirement to constantly deploy signal assets to establish and maintain the tactical internet. FTI replicates digital systems in order to provide situational awareness down to platoon and squad level. FTI provides the linkage between the brigade Tactical Operations Center (TOC), the battalion TOC, the company, and the platoon through radio data nets on key platforms. During 2001, initiated FTI concept activities at Ft. Lewis, Washington.

The second phase of the FTI program was to install a permanent FTI at Ft. Hood in Spring and Summer 1999 with FBCB2 compatible EPLRS radios. FTI is expected to support the Warfighter's digital communication needs of training, testing and experimentation applications. STRICOM will continue to support this capability until III Corps budgets for FTI support in the Army's FY02 Program Objective Memorandum (POM).

The third phase of the FTI program will be the migration to the objective FTI capability, which provides the linkage into all of the maneuver & live fire ranges at Ft. Hood, as well as simulation ties into the III Corps Battle Simulation Integration Center, CCTT facility, Combat Training Support Facility (CTSF), Digital Multi-Purpose Range Complex (DMPRC), Soldier Development Center, etc. - providing an integrated, turn-key solution to digitized training for the new digitized units.

FTI contractors are Lockheed Martin Information Systems, Orlando, FL; TRW, Carson, CA; Nichols Research Corporation, Huntsville, AL.

Opposing Forces Surrogate Vehicle (OSV): Project Manager Training Devices (PMTRADE), has continued with the production and fielding of the Opposing Forces (OPFOR) Surrogate Vehicle (OSV). Using the M113 chassis and M2A2 Bradley turret components, the vehicle resembles a Russian BMP-2. Capabilities closely mirror a BMP-2s troop capacity and weapon system. Currently 100 OSVs have been fielded to the 11th Armor Cavalry Regiment,

the National Training Center (NTC)'s OPFOR. The OSV has performed outstandingly along with positive reaction by both crews and command. Col. John D. Rosenberger stated, "This vehicle is what we need to sustain opposing force. With better technology on these vehicles, we are creating a real threat to the BLUFOR. It better replicates threats we will see in the future. With a tougher force, we are raising the Army standards to a higher level." Col. Rosenberger also said, "The vehicle is more reliable and it removes much of the maintenance load, thus improving the attitude of the unit." Future fielding will continue in support of all Maneuver Combat Training Centers (MCTC). Additionally, with a slight Visual Modification change, this basic configuration is planned to go into production as a Tank variant to replicate a generic tank threat. First tank version should be fielded to JRTC in FY03.

MILES 2000: Project Manager Training Devices (PM TRADE), has continued with the production, fielding, and replacement of the Basic MILES legacy system which was fielded in the late 70's early 80's. MILES 2000 is a state of the art training system that at contract completion will have fielded two Army installations Forts Stewart

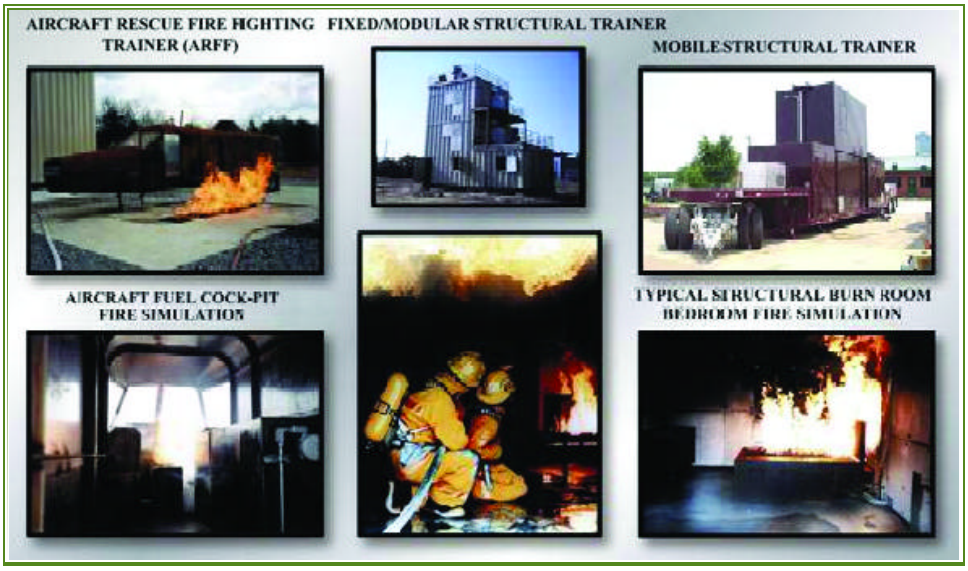
"The OSV has performed outstandingly along with positive reaction by both crews and Command."

COPE THUNDER:

Cope Thunder is an initiative to instrument MILES 2000 then integrate it into the USAF training ranges in Alaska. In FY00 the initial Cope Thunder Deliverable was satisfied, this requirement called for producing an instrumented MILES 2000 Individual Weapon System (IWS) and designing the instrumentation interfaces. The instrumentation involved was to provide position location only and satisfied an USAF Cope Thunder Exercise requirement. Completion of the initial effort will continue into FY02 and include field-testing coupled with the fielding of additional IWSs. This effort is only Phase One of an anticipated six-phase plan to instrument the Alaska Range vicinity at and between Eielson AFB and Fort Wainwright, AK.

and Lewis and all United States Marine Corps requirements, additionally numerous United States Air Force Security Police locations will also have been fielded. MILES 2000 more realistically replicates the ranges of the weapon systems being simulated, additionally the system is more rugged and reliable and less expensive to operate than the previous system. With the fielding of MILES 2000 and follow-on MILES XXI, Soldiers, Marines and Airman will be able to train to maximum extent of their weapon systems and combat platforms and not just to the limits of the current legacy system. Currently the program is in its fourth production option with a fifth option following immediately thereafter. MILES XXI will continue PM TRADE's mission of replacing Legacy MILES at all home-stations, camps and CTCs. In FY01 the MILES 2000 program received a Full Materiel Release from the Milestone Decision Authority (CG STRICOM) for all contracted systems with the exception of the dismounted TOW System. In addition to receiving Materiel Release, LOTS IV and V were delivered to Forts Stewart and Lewis. These deliveries completed the MILES 2000 requirement at Fort Stewart. Lot IV deliveries fulfilled the USMC initial requirements. With the exception of completing the Cope Thunder effort, these deliveries closed out the original US Army MILES 2000 contract, final amount obligated on this contract is approximately $140M. Based upon changes within the BOI attributed primarily to additional IBCT requirements, additional MILES 2000 was awarded in 2nd Qtr of FY01 to support Ft. Lewis and its BCT. This effort is supported by a new contract utilizing the STRICOM Omnibus Contract. A new contract was awarded to Tech-Masters Inc. for additional MILES 2000 hardware for Ft. Lewis; deliveries for this award are scheduled to begin in 3rd Qtr 02.

US Army Fire Fighting Training Systems (FFTS): The US Army Fire Fighting Training Systems (FFTS) are state-of-the-art-training systems that safely replicate flames, heat and reduced visibility (using mineral-oil smoke obscuration/generation system) during fire fighting training scenarios. The FFTS integrate proven, commercially available fire fighting training technology into structural (mobile and modular/fixed) or aircraft rescue and fire fighting (ARFF) training systems. The modular/fixed structural FFTS consists of a three-story trainer that replicates bedroom, kitchen, living room, and storage/office fires. It also includes flash-over simulations, and incorporates (as training aids) a passive stand-pipe/sprinkler system and a replaceable cut-away roof section to allow firefighters to vent the FFTS structure. The mobile



structural FFTS is a transportable, self-contained (i.e. built-in propane and electrical power sources), two floor version of the modular/fixed structural FFTS. The ARFF trainer is a transportable, self-contained (i.e. with built-in propane and power sources), aircraft mockup (42 ft. long by 8 ft. wide approximately) with a reconfigurable wing (for fixed or rotary configurations). It replicates a cockpit fire, an overheated battery (smoke only), and incorporates a cut-away pilot rescue door as a training aid. The ARFF trainer also includes an exterior, rectangular-four pans fuel spill fire simulation to impede pilot rescue. All FFTS configurations incorporate extensive safety features and safeguards to activate system shutdown in case of unsafe propane and temperature levels in the burn rooms, or personnel emergencies. All mobile FFTS have the capability to be connected to fixed propane and electrical power sources. FY96, FY98, FY99, and FY01 plus-up funding has been provided by Congress to procure FFTS for 18 CONUS and 3 OCONUS US Army military installations to date. Some of these FFTS are being used jointly by the Army and by Air Force or civilian fire departments under mutual aid agreements. The first modular/fixed structural FFTS was fielded at Ft. Monmouth, NJ, on 30 Oct 97.

MAIN GUN SIGNATURE SIMULATOR (MGSS) AND DIRECT/INDIRECT FIRE CUE (DIFCUE):

MGSS and DIFCUE are electro-magnetic firing devices being fielded to support critical training deficiencies currently existing at Army Homestations and the CTCs. The MGSS will replace the Hoffman tank Main Gun Signature and the DIFCUE will address a CTC training shortfall at the CTCs by providing an indirect fire cue for RF Indirect Fire. These devices previously were delivered under the original MILES 2000 contract. In FY01 MGSS were delivered to Forts Stewart, Lewis and Hood (MAIS Program). In addition to delivering hardware the associated Pyrotechnics M30 (MGSS) was Type Classified and Materiel Released and the DIFCUE was Type Classified with Materiel Release anticipated in 3rd Qtr of FY02. With the close out of the MILES 2000 contract and additional requirements remaining, a new contract was awarded using STOC that at end state will satisfy current Army requirements.

The first ARFF was fielded at Ft. Belvoir, VA, on 6 Mar 98. The first mobile structural FFTS was fielded at Ft. Lewis, WA, on 26 Jun 98. In FY01 successfully completed smoke generation retrofits on all FFTS fielded to date. Awarded contract modification to procure additional FFTSs with FY01 Congressional plus-up funding. Extended contract option periods from 48 to 96 months to preserve the cost savings benefits of the priced options. Negotiated and finalized delivery schedule of FY01-funded FFTS with contractor. Conducted initial site surveys and briefings at new FFTS installations (FY01-funded).

Tank Weapons Gunnery Simulation System / Precision Gunnery System (TWGSS/PGS): The U.S. Army's only digital, two-way appended, laser based precision gunnery and maneuver training device for Abrams Tanks and Bradley Fighting Vehicles. Also procured for the USMC Light Armored Vehicle. The TWGSS/PGS is inte-

grated with the vehicle's fire control system providing exact replication of the ballistic solution for the selected ammunition type and range to target. The TWGSS/PGS allows full functionality of vehicle's fire control system including lead, super-elevation, & laser range finder. Realistic tracer, burst and obscuration effects are provided in all vehicle sights. Global positioning system, aural effects and data capture for enhanced After Action Review are also provided. TWGSS/PGS has a rate of return on investment of less than 28 months. Tank main gun training ammunition rounds are reduced by 10 round/crew/year; Bradley 25mm rounds are reduced by 192 rounds/crew/year. Over 1700 TWGSS/PGS are currently fielded to Active and Reserve units around the world. Total basis of issue is 2204.

"Over 1700 TWGSS/PGS are currently fielded to Active and Reserve units around the world. Total basis of issue is 2204."

Urban Operations: The United States Army Training and Doctrine Command (TRADOC) formed an urban operations task force for the purpose of developing an overarching urban operations training strategy for the U. S. Army. The strategy was completed in January 2001 and approved by TRADOC in March of 2001 and is currently awaiting approval by the Chief of Staff of the Army. It includes doctrinal and training publication updates, recommendations for both new and upgrades to existing urban training facilities, all three of the live/virtual/constructive simulation domains, training ammunition requirement assessments, and sustainment cost estimates.

The major focus of the strategy will revolve around four new facilities designed to provide individual through battalion level home station urban operations training. These new training facilities will allow units to train soldiers on live demolitions breaching techniques, building entry and room clearing techniques under live and blank fire conditions, limited subterranean training, and an urban training facility large enough to conduct combined arms force on force collective training at the battalion/task force level. The proliferation of these urban training facilities across the Army will help ensure our soldiers are prepared to conduct full spectrum operations in any urban environment.

The Urban Assault Course (UAC) is a five-station round robin training facility designed to teach basic building entry and room clearing techniques. Training will be geared toward blank fire MILES/Special Effects Small Arms Marking System (SESAMS) or "paintball" conditions. The UAC will be equipped with state of the art 3 dimensional targetry that has plug and play capability. The Shoot House will be constructed of bullet absorbing material with interconnecting rooms and hallways. The Shoot House will be a live fire training facility and will be completely instrumented to allow full motion image and audio capture and will also have an After Action Review (AAR) facility. The Breach Facility will be three station live demolitions facility designed to teach explosive door, window and wall breaching techniques. The Combined Arms Collective Training Facility (CACTF) will be the largest of the four new training facilities consisting of 20 to 26 buildings. This facility was designed to provide a force on force combined arms training facility for company team and battalion task force size units. The CACTF will also be fully instrumented and has an After Action Review (AAR) building as part of the facility.

"The proliferation of urban training facilities across the Army will help ensure our soldiers are prepared to conduct full spectrum operations in any urban environment."

PM TRADE PERSONNEL UPDATES:

❖ **24 May 2001:**
Change of Charter from COL Hanford to COL Reyenga.

❖ **July 2001:**
Stand up of new PM DT, LTC Charles S. Lambert assuming charter;
Ms. Shirley Rubens, formerly of PM STI, assumed Deputy Position.

❖ **October 2000:**
Mr. John Ells assumed position as Deputy CTIS;
Mr. Steve Milburn transferred to TMO Huntsville.

POTENTIAL OR ANTICIPATED PROGRAMS:

Advanced Hornet Training System (AHTS): STRICOM (PM TRADE) will develop, field and support the Advanced Hornet Training System to simulate the tactical system. The AHTS will be employed at the Engineer School, selected home stations and at the Maneuver Combat Training Centers (MCTCs). The AHTS will incorporate a remote control capability and upgrade the capability of the munition. The remote control unit (known as the Advanced Hornet Control Station - AHCS), will be a small device (e.g., laptop computer or a hand-held device) that interfaces with the Advanced Hornet munitions to control the munition fields, arm the munitions, set the self-destruct time or destroy the munitions. The munitions will have the improved capability to report its status and act as a RF repeater for other reporting Advanced Hornet munitions. The munitions will also have built-in GPS for position location. Delivery TBD.

Combat Maneuver Training Center Interim Live Fire Instrumentation System (CMTC ILF-IS): The CMTC ILF-IS will be an integrated system of computer software and hardware; workstations; databases; voice and video recording, production, and presentation equipment, interface devices; and communication systems to accomplish the following functions: Exercise Planning, System Preparation, Exercise Management, Training Performance Feedback, and System Support. The CMTC ILF-IS will support live training until the full-up LF-IS is fielded in the FY09-10 time frame. Delivery planned for 4Qtr / FY03

Digital Training Facility (DTF): The Fort Hood DTF is the "Center of Excellence," the ABCS University for the digital Army with a knowledge architecture that is scalable and exportable Army-wide as digitization is implemented throughout the force. As an extension of the Reimer Digital Library (RDL), the DTF functions as the central repository for ABCS training and performance support, including ABCS tactics, techniques, and procedures (TTPs) and technical information relating to ABCS. DTF enjoys connectivity throughout the Army via the RDL, the WARRIOR-T Database, the PEO C3S Knowledge Center, and the Operations and Systems Architecture Library. DTF provides lessons learned to the Center for Army Lessons Learned (CALL), as well as providing access to CALL for our users. In this way, the knowledge accumulated from fielding the first digital division is captured and exploited for the follow-on divisions in III Corps and eventually for the entire Army.

PROJECT MANAGER

WARFIGHTERS' SIMULATION

ACCOMPLISHMENTS

WARSIM:

❖ Completed internal performance demonstration showing performance ahead of schedule.

❖ Completed multiple JSIMS integration events with the other JSIMS Development Agents.

❖ Demonstrated to Congressional Staffers and other Congressional Representatives at the Capital Hill Demo.

❖ Provided the Army user with an initial look at the system during the Army Functional Assessment in Feb 2001.

❖ Briefed CSA and VCSA on program progress.

OneSAF Objective System (OOS):

❖ Awarded the first Task Order under the STRICOM Omnibus Contract (STOC).

❖ Product Line Architecture baseline and pursued commercial based software development activities based on extensive directed reuse of software, data and models from legacy simulations.

IEWPT:

❖ Conducted a successful System Requirement Review (SRR) Aug 01.

❖ Alpha negotiations that directs General Dynamics (formerly Motorola) to interface with WARSIM/WIM as the constructive driver, by-passing CBS/TACSIM. were completed on 13 June 01.

❖ Two IEWTPT Partnering Workshops held March and July 01.

❖ Site visits were completed at: Ft. Huachuca, Ft. Lewis, Ft. Hood, Germany, and JRTC.

CSTAR:

❖ Successfully fielded in July 01 to Ft. Hood.

❖ Agreement reached to combine CSTAR and DBST programs at NTC to provide full wrap around synthetic environment.

❖ Stood up the Integrated Development Environment(IDE) which supports onsite, collaborative development of the OOS and the OneSAF Testbed (OTB) between the combat developer, the material developer and the development contractor teams.

❖ Awards significant contracts to perform Product Line Architecture development, synthetic environment development, life cycle tool development and integration activities.

❖ OOS establishes MOA and begins evolution of common Synthetic Environment Product Line based upon WARSIM reuse to support OOS, WARSIM and CATT programs.

❖ Executed early user involvement through the distribution of components of the system to the US Army Command and General Staff College at Fort Leavenworth. CGSC received the Military Scenario Development Environment (MSDE) for use in its curriculum.

OneSAF Testbed V1.0:

❖ Provided to over 150 users in first year of distribution.

❖ International version developed and provided to the United Kingdom, Canada, Australia, Czech Republic, and Slovakia.

❖ Selected to be the core entity-level simulation role for the Joint Virtual Battlespace (JVB) federation.

❖ Selected to be the simulation driver for the DD2-N ABCS distance learning proof-of-principle experiment.

❖ Provided a prototype Mission Planning and Rehearsal System (MPARS) to the 101st Airborne Div, Ft. Campbell, KY.

DBST:

❖ Architecture was installed, integrated and tested at NTC, FORSCOM and USAREUR.

❖ Provided technical and operational support for numerous Digital Collective training events that include; 4th ID DCX train up (Jan-Mar), DCX Phase I (Mar-Apr), Prairie Warrior 01 (May), NTC Rotation 01-07 (Jun), Initial Brigade Combat Team Warfighter Exercise (Apr-Jun), Lucky Warrior 02-01 (Jul), V Corps Exercise and technical demonstration Victory Strike (Sep-Oct) and Danger Focus II (Dec).

❖ Conducted initial integration testing of DBST and CCTT at Ft. Hood, TX (May).

CBS:

❖ Fielded the ported Game Events Executive Processor (GEEP) software and hardware, in conjunction with the fielding of CBS version 1.6.0, to simulations centers worldwide.

❖ Fielded the ported PC Gateway hardware and Beta version software to simulation centers worldwide.

❖ Fielded the PC WorkStation (PCWS) hardware and Beta version software to simulation centers worldwide.

❖ Fielded the RAID 1 software and hardware for the GEEP PCs to simulation centers worldwide.

TACSIM, version 4 was tested, training provided and installed at all sites.

SIGNIFICANT EVENTS:

❖ WARSIM program directed to split from JSIMS by CSA, later directed to become one program with JSIMS. Rebaseline of Common Component Workstation by PM JSIMS to meet Army requirements.

❖ PM JSIMS accepts responsibility for delivering a JSIMS system that meets Army Title 10 training requirements.

❖ WARSIM IOT&E extended to PW04 timeframe.

❖ AMC Program Audit Review of WARSIM.

❖ Decision by PM JSIMS for WARSIM to develop and use own simulation engine.

POTENTIAL AND ANTICIPATED PROGRAMS:

❖ MPARS fielding expansion past the current 101st site to a variety of sites; 1st Army, CGSC, Ft. Rucker
❖ PM OneSAF supported establishment of Project Agreements with the United Kingdom, France and Australia
❖ Increased utilization of OTB v1.0 by the AMC RDEC Federation and USA Battlelabs
❖ Increased fielding of OTB v1.0 to International customers.
❖ Expansion of common product line approach utilized with the SNE to the WARSIM C4I interface.
❖ Command and Control Simulation Hardware Program

PM WARSIM AWARDS:

❖ Sandy Veautour - Superior Civilian Service Award

❖ Tom Lasch - Superior Civilian Service Award

Special WARSIM Warriors:

❖ Jose Pagan and Julio Aquino - Developed De Facto standard templates for the Army Test Community

❖ Bill Blakeley, Joe Brennan, Robert Miller - Nominated for STRICOM Employee of the Quarter

❖ Linda Morris - Employee of the Quarter Award.

❖ Cindy Harrison - Ten AMC Outstanding Personnel of the Year Award for 2001.

❖ Cindy Harrison - Acquisition Person of the Year Nominee.

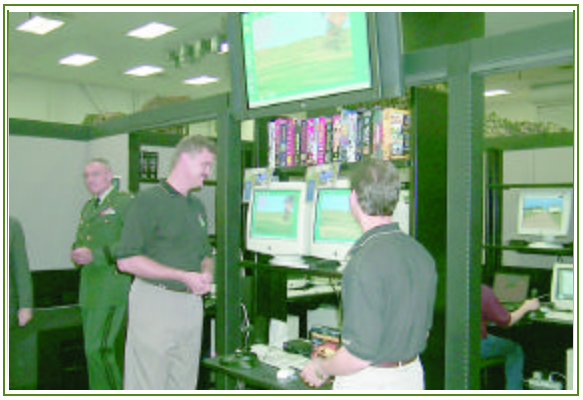
❖ Team OneSAF - STRICOM Team Achievement Recognition (STAR) award for Contract Execution

ENGINEERING

AND TECHNOLOGY DEVELOPMENT DIRECTORATE

2001 PROGRAM HIGHLIGHTS

Advanced Distributed Learning



This is a multi-year Army Science and Technology Objective (STO) program. In part-nership with the Army Research Insti-tute, the research and develop-ment program supports the Total Army Distance Learning Program by researching collabora-tive webbased training and simulation solutions to provide true "anytime, anywhere" train-ing to the Soldier. The goal is to provide a truly instructorless train-ing environment by monitoring student's planning and execution. Using case-based reasoning, the Intelligent Tutoring System will then compare student performance to subject-matter expert per-formances on the same scenario. Students will be assigned reme-dial coursework and similar scenarios to ensure their understand-ing of Army doctrine.

Advanced Robotics Simulation:

Robots or unmanned vehicles on the battlefield are going to play an important role in the Objective Force. In 2001, a new Science and Technology Objective to develop intelligent behaviors for robotic systems within a Semi Automated Forces (SAF) composable architecture environment was initiated. This technology will provide complex mission task & coordination behaviors to real robots. Leveraging STRICOM's expertise in ability to create complex military behaviors in SAF and extending that expertise to create military behaviors for live robots. Simulating robotics systems within Computer Generated Forces will provide a low overhead driver and analysis capability for FCS development.

> "In 2001, a new Science and Technology Objective to develop intelligent behaviors for robotic systems within a Semi Automated Forces (SAF) composable architecture environment was initiated."

Medical Simulation Technologies

In 2001, the first complete prototype Combat Trauma Patient Simulation or CTPS system was fielded to the Center for Total Access, Fort Gordon, Georgia. CTPS is the first distributed interactive medical training system. CTPS has the capability to mirror the care of combat casualties from the initial point of injury, through assessment, triage, initial treatment, and evacuation, all the way to the hospital level of care. While at Fort Gordon it is undergoing initial test and evaluation. CTPS is being developed in cooperation with the Medical Research and Materiel Command (MRMC).

Embedded Training

During 2001, the Science and Technology Objective developing technologies to embedded simulation and training systems in combat vehicles concluded. A demonstration of technologies for platform level embedded training systems inter-operating with other combat platform trainers was conducted in Auburn Hills, MI as a substitute for the cancelled Fall AUSA Meeting in D.C. The embedded training and interoperability demonstration involved a M1A2 SEP Tank and M2A3 BFV equipped with embedded training systems, a Close Combat Team Trainer Abrams SEP Module,

STRICOM GETS VISIT FROM THE FUTURE:

While co-hosting the 39th National Junior Science and Humanities Symposium, "Discovering New Frontiers: Virtual Exploration of Science and Technology", STRICOM welcomed over 240 of the best and the brightest high school students from around the nation to Central Florida. The National JSHS program is a "tri-service sponsored effort aimed at encouraging and recognizing the next generation of scientific talent". Following the highly successful educational outreach achieved in support of the 39th National Junior Science and Humanities Symposium, the STRICOM Commanding General, BG Stephen Seay, directed the development of a **Central Florida High Tech Outreach** initiative that would link the three sectors of academia (K-20), corporate and government with a Web-centered network.

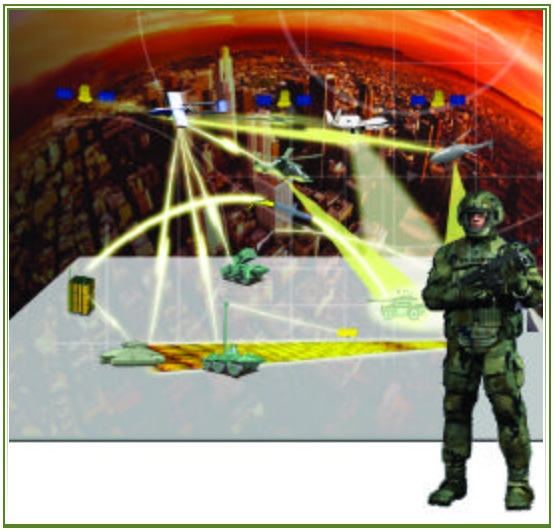
a Future Combat System Training Concept Demonstrator and a Mobile Crew Station Simulations Lab. The two combat vehicles used their vehicle controls, sights and sensors to engage virtual opposing force targets and vehicle commanders were able to hand-off targets and observe each other's fire. All platforms shared a common synthetic environment and participated in linked training scenarios against a virtual threat force on NTC terrain.

STRICOM's embedded simulation/training program is preparing the way for the Current, Interim and Objective Force ground combat vehicles to take advantage of this evolving capability.

A panoramic view of the embedded training demonstration at Auburn Hills, MI.

Embedded Training for Dismounted Soldiers:

A new initiative in embedded training started during 2001 was the Science and Technology Objective (STO) to develop and demonstrate revolutionary Embedded Training (ET) capabilities for the Dismounted Soldier. The STO will provide the capability to empower the dismounted soldier and his unit with individual and collective training on-demand, anywhere and anytime. The dismounted soldier will also have the capability to provide on-demand multi-function training to support multi-skill soldier (e.g. common tasks, maintenance.) It is an opportunity for dismounted soldiers to plan and simulate combat omissions while in the barracks, en-route to mission, or on the field. They will also experience improved leadership and decision-making skills of small-unit leaders, particularly in urban/complex environment.



SIGNIFICANT EVENTS:

Central Florida Technology Development Center Opens

The Central Florida Technology Development Center (CFTDC) opened for business in March 2001. It is a new state-of-the-art Modeling and Simulation (M&S) Research and Development facility located in the Central Florida Research Park, home to the Center of Excellence for Modeling and Simulation in Central Florida. The CFTDC is a partnership building linking the U.S. Army Simulation,Training, and Instrumentation Command (STRICOM), the Army Research Institute (ARI) and the University of Central Florida's Institute for Simulation and Training. It is home to STRICOM's Technology Development Business Area. The CFTDC has over 27,000 square feet of office, laboratory, and test bed/experimentation space. It is the U.S. Army's tool for exploring, developing, and transferring modeling and simulation technologies for military and civilian applications. It also is used for developing partnerships with industry, academia, and other Government agencies. The CFTDC welcomes visitors from around the world to view the modeling and simulation technologies.

Lt. Governor Frank Brogan visits during the CFTDC Grand Opening

PERSONNEL HIGHLIGHTS:

Greg Schow received Ph.D. in Interactive Simulation, August 2001.

OPERATIONS

AND SUPPORT DIRECTORATE

PROGRAM HIGHLIGHTS:

Operations & Support Directorate was first to expand Strategic Partnering to a truly interoperable level by combining five key LCCS Prime Contractors into a unique Strategic Partnering relationship to develop/provide transparent support to fielded training devices across multiply locations as well as domains. These initiatives and activities all include multiple customer involvement and participation.

Commander STRICOM established inaugural Historically Black College and Universities/Minority Institutions (HBCU/MI) college relations program. This was accomplished by using Operations & Support Directorate's contract vehicle.

STRICOM PROGRAMMATIC:

❖ **Universal Detection System (UDS):** Operations & Support Directorate's Live Training Division working in partnership with their Prime Contractor procured a modification package that modified the UDS to be more reliable and less costly system to support. The procurement provided cost savings to the Army, increased the availability and increased readiness levels at both the Combat Training Centers and Home Stations.

❖ **Linebacker System:** Operations & Support Directorate's Live Training Division responded to PM SHORAD'S urgent need for 12 additional MILES Training Kits for upcoming rotations at the National Training Center. Once again, teaming with their Prime Contractor Partner met the 90-day suspense with a cost saving to the Army.

PARTNERING FOR SUCCESS:

During the past twelve months STRICOM Operations and Support Directorate has expanded the AMC Strategic Partnering Initiative to achieve an unprecedented level of integration and interoperability. Through the innovative development and fine-tuning of several highly advanced partnering procedures we have been able to measurable improve and enhance the success and overall performance of every Contract/Program that is participating in the Partnering for Success program. The following LCCS Prime Contractors are participating in this program:

LCCS CONTRACT	COMPANY
❖ Aviation Training	L3 Communications Link Simulations and Training
❖ Constructive Training	Anteon Corporation
❖ Artillery & Chemical Training	Ahtna Development Corporation
❖ Live Training	Raytheon Technical Services Company
❖ Virtual Training	DynCorp Information & Enterprise Technology

The new STRICOM Operations and Support Directorates' Strategic Partnering Model provides an extensive focus on implementation by incorporating internally developed partnering elements such as the Tactical Implementation Plan (TIP), Monthly Progress Review (MPR) Report, Integrated Communications Coordinators (ICC) function, Implementation Taskforce Follow-up Scheduling (TFS), Monthly Conference Call/TIP Progress Reviews (MCC) and an adaptable Strategic Partnering Set-up/Implementation Manual. All of the elements related to the Partnering Process are reviewed on quarterly basis for process improvement advancements so as to continuously streamline and grow the overall performance.

"During the past twelve months, STRICOM Operations and Support Directorate has expanded the AMC Strategic Partnering Initiative to achieve an unprecedented level of integration and interoperability."

OPS DIRECTORATE AWARDS:

❖ Mr. Kevin Clark received the AUSA Sunshine Chapter Acquisition Person of the Year.

DEGREES AWARDED:

❖ Ms. Betty Lunch received her Master of Science degree in Business Management from Capella University in January 2002

❖ Mr. McArthur Baker received his Master of Business Administration from Webster University in May 2001

❖ Mr. Jerry Ervin received his Master of Management from Florida Institute of Technology in August 2000

Operations and Support Directorate

❖ **GTORS ...Global Training Operations Readiness System (GTORS)** is the Directorate's Management Information System, a key component of our internal process. GTORS provides STRICOM and Customer operators accurate and timely data for making management decisions. This year GTORS achieved several key capabilities. GTORS can now receive Electronic Data Interchange (EDI) transmission of personnel data from each of the five Life Cycle Contractor Support Contracts. This capability enables management to visualize how many people are fixing and operating TADSS at each of our 304 worldwide sites. GTORS now serves as the repository for our customer survey responses. We are now able to review our customer's feedback of our performance at each of our sites. Another enhancement is Program Objective Memorandum Request versioning. This capability enables OPS to establish a baseline record of our funding request, while maintaining a living database of our requirements as programs change throughout the year. GTORS also began migration from a server based local area network application to a web-based application. This transition enables GTORS users to log in from anywhere the Internet is available, faster and more efficiently.

❖ Operations & Support (OPS) Directorate provides world-class training support to active and reserve Army, Marines, Air Force and National Guard units. OPS has the synergy to tie together the Live, Virtual and Constructive domains with the Institution, Homestation/Deployed and Combat Training Centers with dedicated life cycle management. We provide a STRICOM Team that supports Army Training Anytime, Anywhere. We have the infrastructure in place today! We have 67 manned sites, 304 total sites with 1,957 personnel worldwide providing support to the Warfighters. The following are our LCCS Prime Contractor Team:

PROGRAM	COMPANY
❖ Aviation Training	L3 Communications Link Simulations and Training
❖ Constructive Training	Anteon Corporation
❖ Artillery & Chemical Training	Ahtna Development Corporation
❖ Live Training	Raytheon Technical Services Company
❖ Virtual Training	DynCorp Information & Enterprise Technology

❖ Operations & Support Directorate's Constructive Division LCCS Contract grew by 18% with the addition of XVIII Airborne Corps Simulation Center at Fort Bragg, NC. This effort added 79 man-years at a total cost of $5.3M. An aggressive Value Engineering Change proposal program resulted in exceeding the goal of $475K with $2M savings.

❖ Operations & Support Directorate's Live Division had a highly successful FY01 with several good news stories that were executed extremely well and have had a positive results in cost avoidance, increased efficiencies, and benefit to the Warfighters. This Division executed a total of $101,833,360 for FY01. This amount included both WCLS dollars and Customer MIPR's received and executed.

❖ Operations & Support Directorate's Live Division supports all three of the Combat Training Centers, with 10 rotations per year at the National Training Center (NTC) and the Joint Readiness Training Center (JRTC) and 6 rotations per year at the Combat Maneuver Training Center (CMTC). This support includes instrumentation for approximately 325,000 Warfighters each year. This Division is the technical authority for Logistics Lifecycle acquisition matters for live training and testing operations conducted at the Combat Training Centers and Homestation sites worldwide. This Division has successfully planned the integration of the Army's transformation and digitization requirements for the Combat Training Centers. This included the integration of the IBCT's into Combat Training Center's rotations. These efforts resulted in the CTC Transformation and Digital requirements being placed in the DA DCSOPS CTC Master Plan. These requirements are all integrated into the FY04-09 POM.

❖ The Operations & Support Directorate's Virtual Division continues to provide exceptional support to troops in Bosnia and Kosovo. This is achieved by maintaining all training systems in this deployed operation at the highest level of operational readiness.

❖ The Operations & Support Directorate's Virtual Division achieved documented Value Engineering costs savings in FY01 of $4,438,799.00.

OPS PERSONNEL HIGHLIGHTS:

❖ · Mr. Jackie Magee received Commanders Coin from Commander Joint Readiness Training Center, Operations Group for support of the Joint Contingency Force/Army Warfighting Experiment (JCF/AWE) held at the JRTC.

❖ · Ms. Bonnie Hirtle assumed duties as Division Chief Virtual Division.

RESOURCES

MANAGEMENT DIRECTORATE

FINANCIAL INPUT:

❖ STRICOM financial execution again exceeded HQ AMC/DA goals for FY01 close out. OMA at 100%; RDTE at 98%; and Procurement at 93%.

❖ STRICOM successfully cleared unliquidated balances for canceling accounts.

❖ First MSC to closeout FY01: STRICOM was the first MSC to closeout the FY01 financial accounts successfully.

COST ANALYSIS & SYSTEMS AND SYSTEMS DIVISION

❖ **Cost Realism for STOC new work:**
Conducted several streamlined cost realism proposal evaluations for new delivery order type contracts for STRICOM's newest acquisition vehicle, STOC. Expectations are that the small increase in cost risk for each program is more than offset by the resource savings to both industry and STRICOM experienced as a result of streamlining the cost evaluations.

❖ Cost and Schedule Status on major STRICOM programs:

Expanded the CG's monthly EVMS briefings to include four additional programs: AVCATT Lot II, CTIA, IEWPT, and ONESAF. Efforts continue on the STRICOM Electronic Data Interchange Pilot program with LMIS and major subcontractor SAIC for standardized electronic delivery of Earned Value Management System (EVMS) data as a cost reduction measure. The CTIA team conducted a Successful Integrated Baseline Review.

❖ Cost and Schedule Status visibility for JSIMS increased:

In addition to our monthly EVMS analysis that culminates in WARSIM EVMS Quad Charts for the JSIMS Alliance Executive and the PM JSIMS, we also initiated combining two prime contractors' Common Component Workstation (CCWS) EVMS data in order to assess an overall joint CCWS condition. Some of this EVMS data is provided quarterly to OSD.

❖ Cost Estimating and Validation:

WARSIM and CCTT Program Office estimates (POEs) were updated and several new POEs were initiated with OSV/OSTV being validated. Cost benefit study for buying out MILES units was developed and validated, identifying several sizeable savings opportunities for the Army. Cost analysis team was trained in the use of the PRICE Software Estimating Tool, which doubles our software estimating tool base. Supported the STRICOM Value Engineering program by validating appropriate cost savings and cost avoidances.

❖ Negative Unliquidated Obligations (NULOs):

STRICOM's aged NULOs were significantly reduced in FY01. This was a result of working in conjunction with STRICOM's tenant organization, AMCOM, and increased training and emphasis on elimination of Problem Disbursements.

❖ Source Data Automation (SDA):

After much coordination and oversight, STRICOM converted to transferring their payroll files by SDA. Prior to this, a flat file of STRICOM payroll was sent to the Navy for inclusion with their SDA. The conversion was successful and no complications were discovered.

❖ WORKLOAD-BASED STAFF ANALYSIS PROGRAM:

An assessment was initiated by the Army Materiel Systems Analysis Activity (AMSAA) to analyze the Peacetime Mission Availability Factor-Table of Distribution and Allowances (TDA) Army Availability Factor for military and civilian positions by direction of DA. Using STRICOM as the benchmark, AMSAA teams lead the coordination of gathering workload information. Additional requirements to support the STRICOM TDA were validated to support the POM input FY03-07. Using FY00 as the baseline, workload data gathered from each employee, rolled into a database, and detailed position information was submitted to AMSAA for review and analysis resulting in recommendations(s) for increased staffing levels. The final outcome of the survey will be used as STRICOM's input for the FY04-09 Total Army Analysis (TAA). The study results will be officially released to STRICOM in FY02.

COMMAND ANALYSIS AND PLANNING OFFICE

❖ **Served as the STRICOM lead for the 2000 Interservice/Industry, Training, Simulation & Education Conference (I/ITSEC).** I/ITSEC 2000 (FY2001) had over 14,000 attendees, exhibitors and exhibit visitors. With 41 countries and 364 companies and commands participating in 300 exhibits this is the premier event of the year for training, simulation and education communities of the U.S. government and industry. As such it is also an event that attracts an ever increasing number of international participants.

❖ **Senior Leader Advisory Board (SLAB):** Is comprised of several retired senior military and civilian leaders who assist us in Command-wide strategic direction. Members integrate our requirements and vision within the Army's requirements and resource processes to ensure STRICOM's needs are adequately considered in the Army, Congress and in the surrounding community.

❖ **Advanced Planning Briefing to Industry (APBI):** STRICOM worked with the National Training Systems Association (NTSA), NAWCTSD, AFAMS and PM TRASYS to host a successful brief of potential future business opportunities to Industry representatives.

❖ **STRICOM Command Forecast:** The information compiled in this Forecast is prepared as an overview of the STRICOM mission, and the overall projections identifying future business opportunities for industry for the next five years. The Forecast is presented at the

Advanced Planning Briefing to Industry (APBI) in a series of briefs by STRICOM, as part of the Joint Department of Defense Brief, NAWCTSD, AFAMS and USMC provide their forecasts as well during this two-day briefing. The STRICOM Command Forecast is available on the STRICOM Homepage.

❖ **International Cooperative Programs:** STRICOM continued its activities under the 5 existing International Data Exchange Agreements (DEA), and served as chairman of NATO Land Group 8 responsible for standards and interoperability amongst allied modeling and simulation activities. New information exchange agreements in the area of modeling and simulation were established with the governments of Sweden and Singapore while development of new project arrangements were in progress with France, United Kingdom and Germany in the area of Computer Generated Forces.

❖ **Live Fire Test & Training (LFT&T):** The LFT&T Program fosters the exchange of technology development initiatives and uses between the live fire test and training communities to better serve the ultimate customer-the warfighter. The LFT&T program helps to implement one of the thrusts articulated by the Secretary of Defense, that of bringing together the testing and training communities for their mutual benefit. Another goal of the program involves establishing partnerships between DoD and the civilian sector. STRICOM managed 5 LFT&T projects during this year.

❖ **Security Assistance/Foreign Military Sales (FMS):** STRICOM extended the breadth of its global impact to 47 countries with the addition of Mexico, Romania, Argentina and Venezuela as FMS customers. A total of 16 new FMS cases were developed worth an estimated value of $42 Million. The command also processed 116 Export License requests in support of the direct commercial sale of modeling and simulation products abroad.

❖ **World Wide Web IPT:** The STRICOM World Wide Web is a reflection of the professional nature of information sharing in today's Army. To establish the policies and procedures for the use and management of STRICOM's WWW a WWW IPT was formed. The IPT will coordinate and implement policies, procedures and functional requirements to improve and expand the STRICOM web site for the benefit of the Command.

❖ EXHIBIT IPT:

The STRICOM Exhibit Strategy IPT was established in March 2000. The members, collectively, are the PM/directorate levels STRICOM managers responsible for the exchange of information between the IPT and the POC for the Conference and/or Exhibits. The purpose of the IPT is ensure a STRICOM/AMC presence exists at all Conferences and/or Exhibits.

BRITISH LIAISON

BRITISH LIAISON OFFICER

MISSION:

To encourage, facilitate and maintain liaison between all sections of the US and UK modeling and simulation communities in order to exploit opportunities for mutual benefit in operational effectiveness and acquisition efficiency.

HIGHLIGHTS:

- Post established March 2001. Remit covers all training systems.
- Discussions pertaining to the Memorandum of Understanding on Combined Arms Tactical Trainers continue to progress US CCTT/UK CATT synergy. Collaborative use and validation of terrain databases is extant, and greater interoperability between semi-automated forces is being investigated.
- A new US-UK Project Agreement concerning Research, Development, Test and Evaluation of Computer Generated Forces has been drawn up and is awaiting HQ AMC Approval.
- Trading of thoughts and experiences regarding the Evolution of MOUT Training Requirements has been ongoing, mainly via the NATO Land Group 8 Panel.
- An agreement on the most cost effective use of T70 targets for use in testing of a UK air-launched anti-tank munition was reached.
- The BLO provided an international flavor to the STRICOM road running team which won the Government Organization Category in the Orlando Corporate Road Race.

GERMAN LIAISON

GERMAN LIAISON OFFICER

MISSION:

Establish, maintain, encourage and support liaison between all sections of U.S. and German simulation and modeling communities/agencies in order to share benefits in operational effectiveness and acquisition efficiency

HIGHLIGHTS:

- Post first time established in 1995
- The first assignment ended in June 2001, the second LNO started his assignment in November 2001
- Ongoing discussion in cooperation of the instrumentation of the U.S. and German Army training enters

GENERAL TASKS:

- POC for U.S. and German Government, industry and academia on armament and defense issues
- Support planning and execution of defense programs
- Negotiate contracts and support FMS cases
- Support international program offices
- Coordinate technical data exchange programs
- Manage scientists / engineers exchange programs
- Monitor, analyze and report on defense issues
- Support on-site quality assurance

ITALIAN LIAISON

ITALIAN LIAISON OFFICER

MISSION:

To follow developments of new software and devices adapted to technical-operational architecture and structure of Italian Army simulation system to increase information-exchange between ITAGS and U.S. STRICOM and to cooperate for next staff talks.

Dependence: from SME (Italian General Staff) and ITAGSRIF (Force Deployment Department).

Aim: to increase mutual knowledge in research and development of live, virtual and constructive ground's simulation systems.

HIGHLIGHTS:

- Post established October 2001. Action covers all training systems for ground's forces (Army).

- Trying to create a liaison and "friendship" web to foster mission and importing to Italy the American way to approach technical and simulation problems to develop, common models of simulation and maybe in future, common C4I systems.

- Increasing relationships and partnership with most important factories and agencies operating in modeling and simulation field.

PRODUCT MANAGER

FOR SIMULATION TECHNOLOGY INTEGRATION

The Product Manager (PM) for Simulation Technology Integration (PM STI) evolved from a Product Management Office oriented on product development and program management to one oriented on integrating requirements across the command, and Army Transformation. The PM transferred on-going programs to other STRICOM PMs and is working to provide cross-command information. This encourages leveraging various program requirements and concentrates on interoperable training solutions for the Objective Force.

PM STI IS RESPONSIBLE FOR THREE MAIN FUNCTIONS:

❖ Enhance interoperability and integration of requirements across the Command through awareness, understanding and coordination.

❖ Serve as the command representative and central point of contact for Army Transformation to the Objective Force. This includes special emphasis on the Initial/Interim Brigade Combat Teams and Future Combat Systems.

❖ Serve as the entry point to the command for external customers. This includes serving as the STRICOM point of contact for mission development.

"PM STI successfully ended the Advanced Distributive Simulation technology (ADST) program. The program performed over $285 million in simulation research, development, and Army testbed improvements."

OTHER PM STI DUTIES INCLUDE:

❖ Serve as the initial STRICOM Omnibus Contract (STOC) point of contact for the Command. Coordinate these actions with the Principal Deputy for Acquisition (PDA).

❖ Maintain liaison with customers to encourage close cooperation with the Command, across the Command.

❖ Develop, coordinate and execute Memorandums of Agreement with customers in coordination with the Command Analysis Program Office.

❖ Act as the co-chair of the Simulation to C4I Interoperability Integrated Product Team to the Army Modeling and Simulation Executive Council with the CECOM co-chair.

❖ As necessary, serve as the initial product development team until such time as the correct STRICOM organization is identified as the lead.

PM STI ACCOMPLISHMENTS:

❖ Successfully ended the Advanced Distributive Simulation technology (ADST) program. The program performed over $285 million in simulation research, development, and Army testbed improvements. Success stories from this effort include fielding the Advanced Concept Research Tool (ACRT), ModSAF/ OTB development, AC-130 SOF training systems, producing the Army Experiment Series for AUSA, and operating the four Core DIS facilities.

❖ Identifying and creating an implementation plan for use of the Dynamic Object Oriented Requirements Systems (DOORS) as a command wide tool to efficiently accomplish the requirements integration mission.

❖ Assisted PM Small Arms as members of the Objective Individual Combat Weapon (OICW) Training IPT. The OICW will be the first infantry developmental weapon within the Objective Family of Small Arms as outlined in the Small Arms Master Plan (SAMP). The Decision IPR for OICW is slated for Summer 2002.

❖ Worked with the Training Initiatives Office (TIO) as part of the Training and Doctrine Command (TRADOC) effort to tell the Chief of Staff of the Army (CSA) Army Transformation story. The cumulative efforts of STRICOM and the TIO office (Training Initiatives-Army Transformation [TI-AT]) were to be presented at the October 2001 AUSA Conference in Washington, D.C. Although the October 2001 AUSA was cancelled, efforts are under way to prepare for the October 2002 AUSA. The focus again this year for this Program will be to relate the CSA's Army Transformation story and the Objective Force vision. The TI-AT IPT consists of STRICOM, TIO, Lockheed-Martin, ATSC and other Contractors.

❖ Supported the Objective Force Task Force by conducting an intra-command summit to identify all those working on Objective Force (OF) and Future Combat Systems (FCS). Conducted opening meeting with PM OF to assess STRICOM alignment and capabilities as the training materiel developer in partnership with PM OF in support of FCS. Developed and maintained a STRICOM centric Iconic Mind Map that illustrates key STRICOM-OF linkages and supporting documentation.

❖ Supported the Interim Brigade Combat Team (IBCT). Coordinated command receipt of $15M+ in support of the IBCT and requested $50M more for ten programs. Coordinated STRICOM acceptance of four new acquisition programs. These programs are the Basic Skills Trainer, Roadway Simulator Trainer, MK 19 MILES and NBS TADDS for the NBC Stryker variant.

❖ Supported the IBCT Training Aids, Devices, Simulators, and Simulations (TADSS) IPT. It is now a virtual/telephonic IPT.

❖ Received, reviewed, staffed and provided the command position on more than 150 documents including Mission Needs Statements (MNS), Operational Requirements Documents (ORDs) and System MANPRINT Management Plans (SMMPs).

❖ Supported the Army Transformation Exercises and Experiments by attending bi-monthly IPTs and ATECP Funding Council Of Colonels. Planned and executed successful support during DCX phases I & II. Requested and received Army funding in the amount of $928K for MILLENNIUM CHALLENGE 02 and coordinated STRICOM support.

❖ Core member of the Software Blocking (SWB)Policy Draft Group insuring that training was a co-equal. Member of the Systems Oversight Council. Co-chair of the Simulation to C4I Integration (SIMCI) IPT which provides recommendations to the Army Modeling & Simulation Executive Council (AMSEC).

SIGNIFICANT EVENTS:

❖ 11 June 2001: PM STI change of Charter and new mission began.

POTENTIAL OR ANTICIPATED PROGRAMS:

❖ · PM STI RI Cell implement DOORS as the Requirements Synchronization and Assessment (RS&A) tool for the command and TRADOC.

❖ · Conduct product clarification early in the acquisition process, as evidenced by continued relationship with the OICW Training IPT, until the Program has become more clearly defined.

❖ Planned the interoperability demonstration for the annual AUSA conference in October 2001. The conference was cancelled, but a pared-down demonstration was conducted at OASIS in Detroit. Planned and conducted a descoped interoperability demonstration at the 2002 AUSA Winter Symposium in Ft. Lauderdale.

❖ Supported the establishment the Objective Force Training Working Group (OF-T-WG) and participates as a member and Technical Advisor.

❖ Established a central point of entry for external customers and contractors into STRICOM by establishing a "Doing Business With STRICOM" phone number (407-384-3773), email (doing_business@stricom.army.mil), business card, brochure and STRICOM Home Page entry.

❖ Developed documentation of business process model which was subsequently handed off to the PDA.

❖ Hosted an Army wide TADSS Integrated Product Team meeting to plan support for the Stryker family of vehicles and the Interim Brigade Combat Team in Jun 01- resulting in a coordinated plan for providing nondevelopmental training solutions and in support for funding that was validated by Department of the Army staff.

❖ Sponsored a Requirements Analysis/Front End Analysis for the Stryker Driver's Trainer and Maintenance Training Systems- providing a training requirement task list and decision aid for the TRADOC community.

NATIONAL GUARD BUREAU

National Guard: Community-based, globally engaged Training Aides and Devices, Simulators and Simulations

The National Guard Bureau continually directs resources toward the training and sustaining of National Defense forces. Many in Washington believe America is growing increasingly vulnerable to attack and Congress has shown growing interest in sustaining a strong National Defense. This requirement extends the missions of the Guard as Defense Appropriations included funding to investigate alternative uses of simulation and training technology in the development of simulated training programs. Additionally, simulation in training reinforces readiness and proficiency of the National Guard, as often articulated by the Secretary of Defense, brings together developmental and training communities for mutual benefit. Requirements often establish partnerships between the Department of Defense, Industry and the civilian work force.

This document is a users guide for the training devices under development and fielded by National Guard Bureau. From this document you should be able to find points of contact, installation and maintenance requirements. This document was developed in support of the National Guard Bureau to provide information on space, power and communication requirements in support of Training Aides and Devices, Simulators and Simulations (TADSS) operation and demonstrations.

This **Smart Book** was prepared by the National Guard Liaison Office to the CDR STRICOM. Comments can be submitted to LTC James H. Godfrey, National Guard Advisor, AMSTI-PMCATT, STRICOM,12350 Research Parkway, Orlando, FL 32826-3276 Phone number (407) 384-3516 DSN 970-3516 FAX (407) 384-5180.

Many projects initiated as advanced research projects by the Defense Advanced Research Projects Agency (DARPA), have transitioned to a follow-on user or sponsor. STRICOM provides development and fielding in support of the National Guard Bureau NGB-ART. POC information is incorporated within.

"Many in Washington believe America is growing increasingly vulnerable to attack and Congress has shown growing interest in sustaining a strong National Defense."

AE5
A-FIST
A-FIST XXI
AGTS
ARMS
AVCATT
AVG ICOFT
AVENGER T
BBS
BICEP to CAV-T
C41
CBS
CCTT
COFT
M1 I-COFT
M1 U-COFT
M2/M3 I-COFT
M2/M3 U-COFT
M1A1 U-COFT
M-COFT
CTPS
DBST
DFIRST
DSTATS
ENCATT
EST 2000
FIST-B
FSCATT
GUARDFIST II
HSOT
ICD
IMTS
JANUS
JANUS-D
LINEBACKER
MAINT TNR
MILES
MILES 2000
MLRS
MST
ONESAF
SIMNET
STPT
SYNTHETIC ENVIRONMENT CORE
TSV
TWGSS/PGS
VIGS
VLET
WARSIM

INSTITUTE FOR

CREATIVE TECHNOLOGIES

TOP PROGRAMS DURING FY2001:

❖ Graphics Research Lab

This laboratory is designed to introduce realistic, computer-generated environments, objects and people for better soldier training. Light Stage 2 was completed for scanning faces and human size objects. Work began on High Dynamic Range Photography (HDR shop) for extending the dynamic range for captured lighting from 0-255 to infinity. This means that artifacts of objects taken with the sun as the background can be recovered from the photograph.

❖ Mission Rehearsal Exercise (MRE)

Interactive stories, virtual humans, and immersive sound were investigated to create mentoring environments for mission-oriented training.

The surround-sound effect takes into account changes in pitch and spatial constraints.

> “Virtual humans are capable of displaying human emotion, natural verbal and non-verbal language, chatter and realistic body movement from one scene to the next.”

Virtual humans are capable of displaying human emotion, natural verbal and non-verbal language, chatter and realistic body movement from one scene to the next.

The stories produce tension and dilemmas as humans interact with the characters.

❖ Flat World

Research began on using digital flats for MOUT representations.

This project creates a mixed reality environment where real objects can be integrated into a virtual environment and soldiers can move about without being tethered for motion synchronization.

The objective of this project is to create a mobile reconfigurable virtual urban environment for training by small units prior to deployment.

The project will expose soldiers to an array of computer-generated images, situations, and sounds that will enable them to use their critical decision making skills and familiarize themselves with the environment to which they are about to deploy.

❖ ALTSIM

A research effort with Paramount looked at using story content for distance learning objectives.

❖ Training Applications using the Game-Platform Metaphor

Research began on using PC and console based games for training objectives.

The game board for the PC-based application called "Full Spectrum Command" was developed and adopted for the Infantry School in four months. A record for any acquisition project -- from concept to adoption by the users in a single fiscal year.

NEW RESEARCH PROGRAMS:

- Graphics

- Research will continue in the light stages for Light Stage 3 for immersing larger objects into photorealistic virtual environment. HDR algorithms will be transitioned and implemented into commercial off the shelf graphics cards including NVIDIA and ATI boards.

- MRE

- Research will continue on the AI representation in emotion, natural language, and speech.

- Training Applications using the Game-Platform Metaphor

- The PC Game application for "Full Spectrum Command: will go into production and be ready for alpha test in September 2002. An X-Box training application called "Full Spectrum Warrior" will begin prototyping graphic representations of squad level tactics.

HIGH PROFILE EVENTS DURING FY2001:

- **Inside Games Workshop (May 2001)**

This workshop provided an opportunity to bring together the military and the Game Developer industry. The workshop presented Game production techniques and showcased how games could be used in training.

- **Inside Hollywood Workshop (October 2001)**

This workshop provided an opportunity to bring together the military and the entertainment industry in a joint effort to improve story and character for training simulations. The workshops presented production techniques to the military community featuring talks on issues such as graphics, storytelling, and special effects for use in simulated training exercises.

SOLDIERING

is an affair of the

Heart

2001 STRICOM ANNUAL REPORT
AVAILABLE ON-LINE@
HTTP://www.stricom.army.mil

SIMULATION, TRAINING AND INSTRUMENTATION COMMAND



12350 RESEARCH PARKWAY
ORLANDO FL 32826-3276
PHONE: (407)384-3500
DSN: 970-3500

sg02-07-030